

THE ORIGIN AND DEVELOPMENT OF
COMMISSION OF GOVERNMENT LAND SETTLEMENTS
IN NEWFOUNDLAND 1934 - 1969

CENTRE FOR NEWFOUNDLAND STUDIES

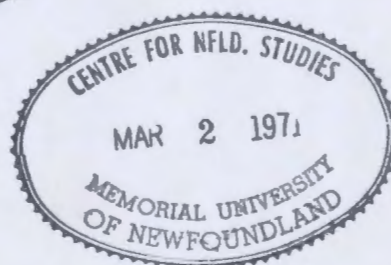
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The Origin and Development of
Commission of Government Land Settlements
in Newfoundland 1934 - 1969

by

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An Abstract of a Thesis Submitted to the
Faculty of Graduate Studies in Partial
Fulfillment of the Requirements for the
Degree of Master of Arts.

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It was the purpose of the research which went into the present study (a) to investigate the reasons for the establishment of a land settlement scheme in Newfoundland during the period, 1934-1942, and to examine the methods used to implement it; (b) to investigate the political, natural environmental (site, material resources) and human factors that contributed to failures or successes in particular settlements; (c) to examine the demographic and landscape structure of each of eight settlements initiated under the scheme both in the period of Government sponsorship and at the present time. From a geographical point of view the main problem was interpreted to require (a) a reconstruction of the spatial organization of the land settlements during their early years of development and (b) an examination of the sequential development of these same settlements from their present structure.

The study began during March 1969 with examination of the literature, the collection of data from the Commission of Government files contained in the Newfoundland Archives and government departments, and the interviewing of key personnel involved in the land settlement movement. During the period May - September 1969 field visits were made into each of the eight land settlements: Markland, Haricot, Lourdes, Midland, Brown's Arm, Sandringham, Winterland and Point au Mall, where informal interviews were conducted with as many original land settlers as possible. Formal questionnaires were also completed for each household within the former designated territory established for land settlement.

It was found that the main purpose of the land settlement scheme was to relieve the problem of unemployment. In its initial stages the scheme proceeded purely as an experimental scheme without any clearly defined policy in such important matters as - site selection, settler selection, management, or land tenure. Though the scheme was reorganized as a result of policy changes implemented in 1939, the total program affected only a small proportion of the Newfoundland population, and more particularly, a very small proportion of families on relief. The prosperity that came with World War II appears to have done more to rehabilitate families who did enter the land settlements than the land settlement scheme itself. Since 1945 the land settlements appear to have evolved in much the same manner as other small settlements in Newfoundland, though each bears some population and landscape remnants of its origin.

PREFACE

Purpose of the Study

It was the purpose of the research which went into the present study (a) to investigate the reasons for establishing a land resettlement scheme in Newfoundland during the period of Commission of Government, 1934-1948, and to examine the methods used to implement the schemes; (b) to investigate political, natural environmental (site, material resources) and human factors that contributed to failures or successes in particular settlement schemes; (c) to examine the demographic and landscape structure of eight settlements both in the period of Government sponsorship and at the present time. The main problem was two-fold: (a) to reconstruct the spatial organization of the settlements during the early years of their development and (b) to examine the present structure of these same settlements.

The basic hypotheses developed for testing were (a) that the developmental possibilities which the Government had anticipated in the land settlement movement were very largely unrealized, but that the scheme itself, in spite of its exorbitant costs, had succeeded in improving the economic lot of the families that were directly involved in it; and (b) that the settlements created under the land

settlement scheme have evolved more in response to post-1940 economic and social changes within their respective localities than from processes generated under Government planning and control.

The validity of the initial assumptions was examined through bibliographic and field research. It was concluded (a) that Government efforts to effect social and economic reform through its scheme of land settlement during the 1930s and early 1940s, involved a very small percentage of the Newfoundland population, and more particularly, a very small percentage of families on relief; (b) that only a small proportion of the initial land settlers were effectively rehabilitated as a result of the scheme; (c) that World War II, and post-war prosperity not only made land settlement an unnecessary program but also salvaged some of the more problematic settlements which had been started, and changed social and economic conditions in the others, and (d) that the land settlements since 1945 have evolved along lines and in response to both internal and external stimuli that parallel the changing demographic and landscape structures of non-government sponsored rural settlements throughout Newfoundland. In other words, the rural dynamics operating and effecting change in land settlements over the last two and a half decades, have been basically those affecting change in hundreds of small settlements throughout the island.

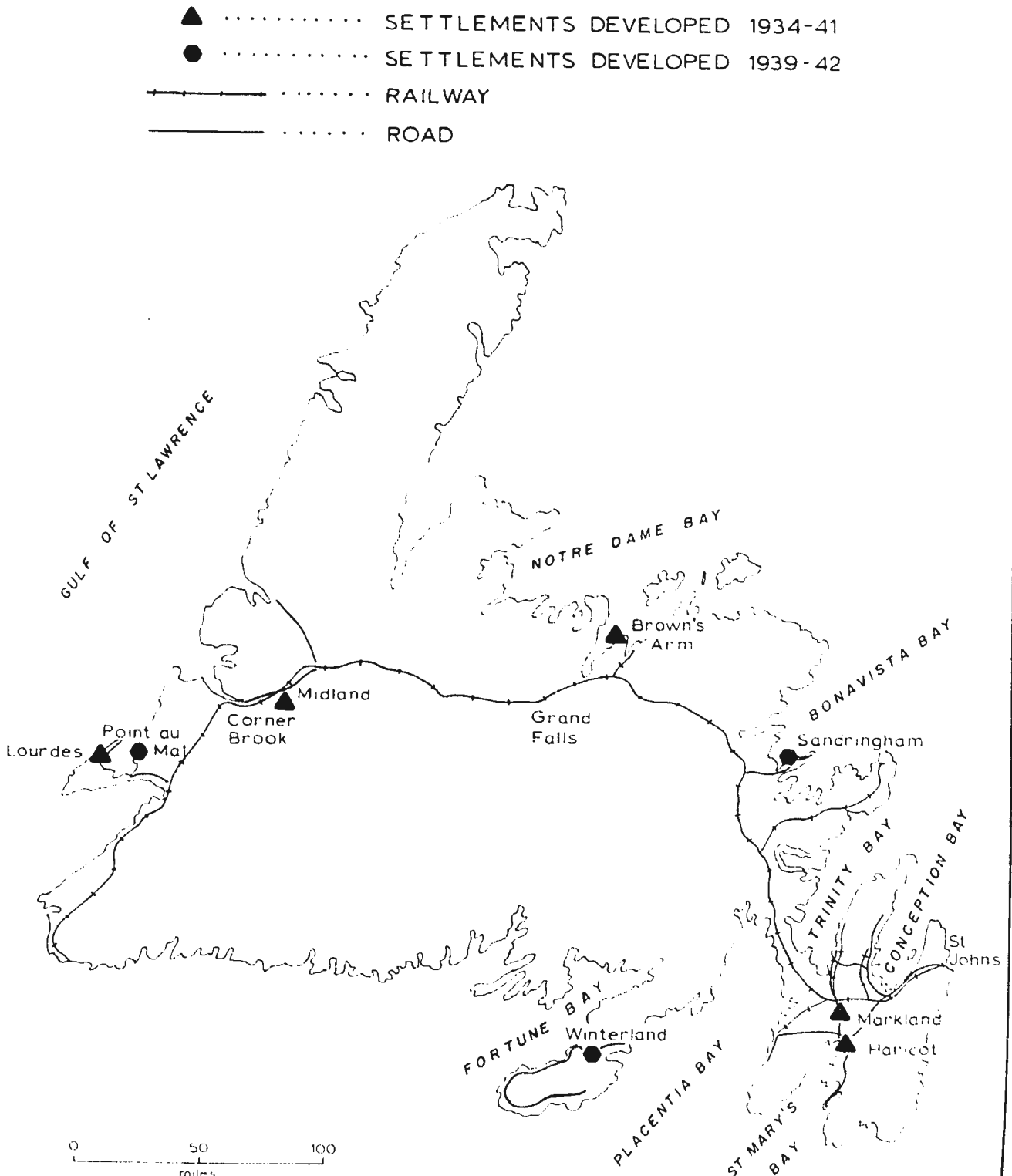
The Study Area and Explanation

The study area includes the designated territory established for the purposes of land settlement under Commission of Government at each of the following eight locations identified on Fig. 1; Markland, Haricot, Lourdes, Midland, Brown's Arm, Sandringham, Winterland and Point au Mal. In the discussion Chapters I and II deal with the purposes of the scheme and the political processes involved in creating the settlements. Chapter III discusses the site and material resource qualities of the eight settlements. Chapters IV, V, and VI consider the human (settler) and landscape (settlement) structure in two temporal sequences - origin to 1945, and 1945 to 1969. Markland - the first, largest and most controversial of the land settlements - is treated separately in Chapter IV; Lourdes, Haricot, Brown's Arm and Midland are grouped, and referred to collectively, as Minor Land Settlements in Chapter V; Chapter VI reviews the origin and development of the Small-Holding Settlements Sandringham, Winterland and Point au Mal.

Previous investigations and research into the land settlements have been few and these primarily incidental to the objectives of the various studies undertaken. The single publication in which the land settlements are considered as the central theme of the investigation is contained in

Figure 1

LOCATION OF NEWFOUNDLAND (COMMISSION GOVERNMENT)
LAND SETTLEMENTS 1934-42



J.H. Gorvin's Report on Newfoundland Land Settlements published in 1938. This report, however, examined the structure of five land settlements at a period when Government was deeply involved in establishing them, and was intended to guide Government policy in revising the same. Since 1938 the Newfoundland land settlements have not been examined as a particular set of settlements, established under a particular set of political, social and economic circumstances. In his study of Settlements in Western Newfoundland, W.C. Wonders (1951) examined the settlement geography of Lourdes and detailed briefly socio-economic conditions at Point au Mal, though in reference to the latter he writes "It was not possible to visit the community unfortunately." In 1963 Dr. A.F. Williams included the community of Sandringham among seven communities in Land Use Surveys, North East Coast. A land use map of Sandringham, compiled and drawn by A.P. Dyke, is reproduced in the text by permission of Dr. A.F. Williams. Apart from these works, the Newfoundland land settlements have received only scant attention in the existing literature on Newfoundland.

References to published materials are given in the form (author, year; page) with full bibliographic reference at the end. A similar form is used for important references to persons who supplied valuable information through personal contact. Letters, messages, memoranda, annual

reports and other manuscripts relating to the Land Settlement scheme in the Newfoundland Archives are referenced in the form (FOC/NA/120/1936) as an example, where the sequence of FOC designates Files of the Commissioners, 1934-1948; NA, the Newfoundland Archives; 120, the carton filing number; and 1936 the year in which the document was written. A fuller bibliographic reference to archival documents is also given in the bibliography.

Acknowledgements

This study began during March 1969 with examination of the literary sources, the collection of data from archival sources and government departments, and the interviewing of key personnel involved in the land settlement movement. Field investigations were made possible during the summer months by a grant from the Institute of Social and Economic Research, Memorial University. Additional assistance was given by the Department of Mines, Agriculture and Resources, by providing original cadastral survey plans of each land settlement.

Foremost among individuals to whom I am grateful are Dr. A.G. Macpherson, my supervisor at Memorial University; Dr. W.F. Summers, Chairman, Department of Geography, Memorial University and Mr. Michael Staveley of Memorial University for the loan of personal materials and for other assistance and advice; Mr. G. Chafe, Mr. K.

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CHAPTER I

THE PURPOSE OF THE LAND SETTLEMENT SCHEME

Relief and Land Settlement

Acting on recommendations contained in the Amulree Commission (1933), the elected government of Newfoundland dissolved itself in 1934, and self-government which had prevailed since 1855 was replaced by an appointed commission. The sequence of events that led to the political debacle was deeply rooted in economic depression. Progress had begun to slow in Newfoundland during the latter years of the 1920s; world depression during the early 1930s added further disruptive effects.¹ The depressed economic situation manifested itself in many forms, such as mass unemployment, civil disobedience, a large and increasing national debt, meagre government revenues, financial bankruptcy and finally political chaos. Social and moral depression followed in the wake of economic and political collapse.

The new Newfoundland Government, called the Commission of Government, accepted its terms of reference to govern from the Amulree Commission recommendations, and the first commissioners interpreted from these their main objectives as two-fold. Firstly, immediate and temporary

relief measures were necessary to feed, clothe and restore to health a large proportion of the population described by the 1933 Amulree Report in the following words:

The people in certain parts of the country are now living in conditions of such extreme misery and want that there can be little hope of restoring them to useful activity unless they are first assured of essential food and clothing and enabled to recover their vitality.... (Amulree, 1933)

The second, or long term, objective of the government was to attempt to restore and strengthen the economic structure of the country through the redevelopment of existing industries and the development of new resources (Perlin, 1959; 46).

The problems of unemployment and relief persisted throughout the 1930s and were only eventually alleviated by economic improvements that came with the Second World War rather than through the successful implementation of any of the Commission of Government development programmes. Figure 1.1 shows that between 1933 and 1939, the number of persons on relief varied between 30,000 persons and 79,000 persons annually. Winter seasonal unemployment and relief were of very critical proportions. The number of persons receiving both able-bodied and sick relief did not fall below 50,000 for the December to May periods from 1933 to 1939, but was usually of the order of 70,000 people, or approximately one quarter of the total population.² During the same period summer unemployment and relief were abnormally

Figure 1.1

Number of persons on seasonal relief in Newfoundland, 1933-1944

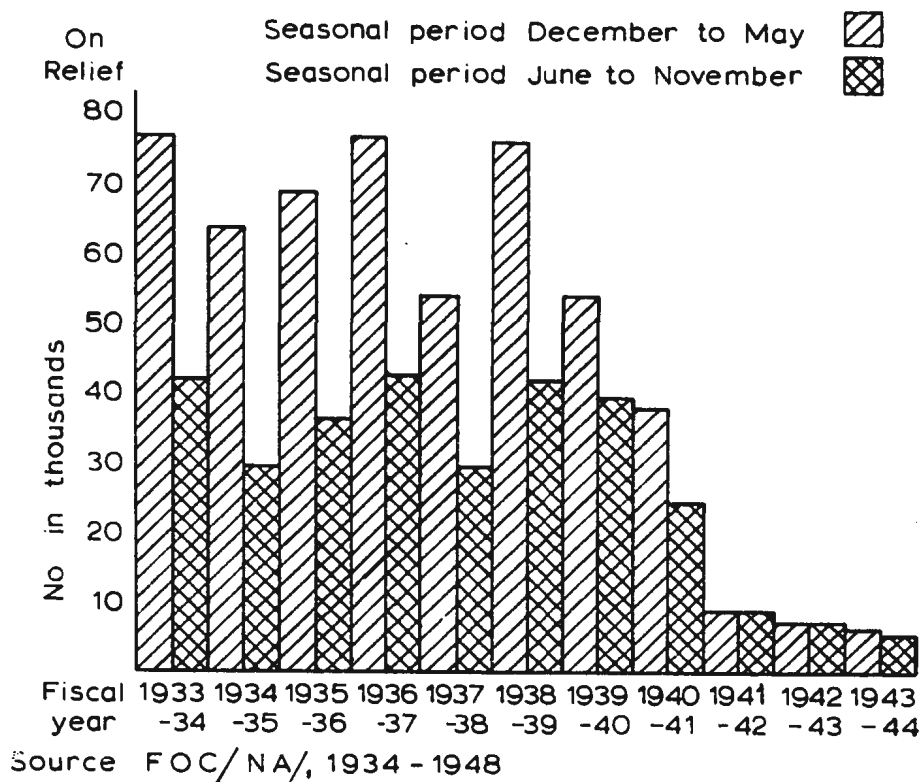
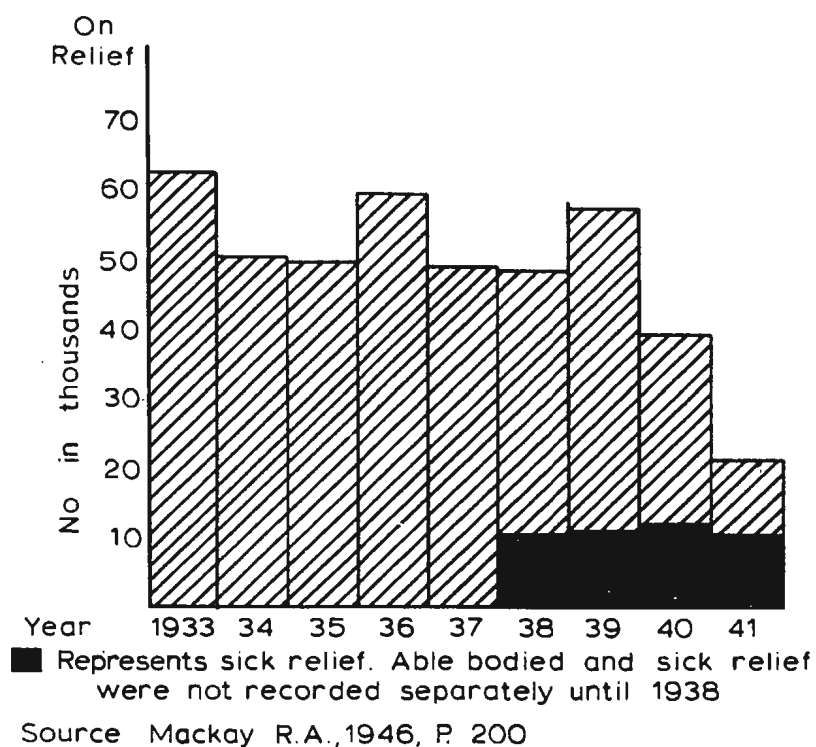


Figure 1.2

Average number of persons on monthly relief in Newfoundland, 1933 - 1941



high in an economy which was largely based upon summer seasonal activities such as fishing, and in no one year did relief recipients fall below a number equivalent to less than 10 per cent of the population, but actually ranged between 10 per cent and 21 per cent.

Until 1938 able-bodied and sick relief statistics were not recorded separately. For 1938 and 1939, however, the ratio of able-bodied to sick relief were 3.5 to 1, and 3.8 to 1, respectively (Figure 1.2). During 1940 this ratio was reduced to 2:1, in 1941 to 1:1, and in 1944 all relief payments were made to disabled and sick recipients. The immediate problem which the Commission of Government faced in 1933 was immediate throughout the remaining years of the decade.

The distribution of the unemployment and relief problem was not unique to any one region or industry, but was widespread over the whole of the island and among the various branches of the economy. Some regions and industries, however, tended to be more depressed than others. In St. John's many families faced the grim realities of poverty and hunger due to the closure of a number of factories and workshops and the suspended operations of others. (Amulree, 1933; 10). Conception Bay towns, especially those whose populations depended heavily upon wage income from the Bell Island iron ore mines and the coal mines of Cape Breton, represent another region where

unemployment and relief soared to formidable proportions. A third region of extreme depression was that of the scattered fishing settlements on the islands and shores of Placentia Bay, where a succession of poor fishing seasons along with depressed prices for fish catches followed the calamitous tidal wave of 1929. In that most parts of the island depended upon fishing, the low value of fish forced large numbers of fishermen to accept relief in the off season. (1933, p. 50).

The general approach of the Commission of Government to the problem of economic rehabilitation was founded upon two basic hypotheses. Firstly, it was assumed that the reorganization of the island's main industry, the fishery, and the second largest industry, logging, through an improvement of technology would result in greater productivity and efficiency, but would also mean a decline in the numbers of persons employed in these two activities. Secondly, it was believed that industrial development had reached its limits and that only a small percentage of those unemployed could expect to find employment in mining and manufacturing during periods of relative prosperity. (FOC/NA/129/1934). Founded upon these two assumptions and the statistical facts of unemployment and relief, the first commissioners developed the theory that it was impossible to find forms of gainful employment in the existing economic activities of the island for the able-

bodied unemployed families. Although there were fluctuations from year to year and season to season in the number of families and persons receiving able-bodied relief, it was reckoned that some 6000 families, or about 10 per cent of the total population, would have to be channelled into new types of economic activity (FOC/NA/139/1936a).

In January, 1935, the Commission of Government announced its first major development policy to absorb the redundant labour force of both the urban and rural sections of the island. The scheme accepted was that of land settlement. Although the programme appears to have been generally agreed upon by all members of the Commission³, it was primarily supported by two commissioners, Thomas Lodge, at the time the Commissioner of Public Utilities, and Sir John Hope Simpson, Commissioner of Natural Resources. Lodge saw land settlement not only as a solution to the immediate problem of providing relief assistance but also as one with long range implications. He writes thus:

If I am right I see no alternative but settlement on the land. Within the limits of our population that seems to me the only source of living which is capable of indefinite expansion. I do not suggest that Newfoundland is an ideal place for farming or that anyone with previous ties would choose it in preference to a dozen other countries. But if Newfoundlanders want to live in Newfoundland they must in the long run get their living out of the country.... It may not be a luxurious living, but it will be at any rate better than that of the majority of those who are today attempting to live by catching and drying codfish. (FOC/NA/139/1936a)

General Government Policy 1934-1942

Between 1934 and 1942, the years which the Commission of Government established a series of land settlements, the general policy towards the scheme wavered and changed. Development policies were altered and the projects reviewed and revised. It thus becomes possible to divide the development period into general policy phases and time sequences based on modifications in government participation. In general outline these phases can be designated as follows: (1) April 1934 - January 1935, a period of experimentation in which government gave financial assistance. (2) January 1935 - March 1937, a period during which government attempted to promote land settlement to solve unemployment but found the cost prohibitive. (3) March 1937 - January 1939. Further land settlement projects were delayed as Government attempted to raise early settlements to a state of independence. Several experts were brought to the island to advise on land settlement and rural redevelopment. (4) January 1939 - June 1942. A three-year plan was implemented to revise existing land settlements and a beginning was made on the establishment of a new type of settlement. Under the latter scheme four settlements were begun of which three were completed. After 1942 the government abandoned its program of land settlement.

The land settlement scheme had its beginning with a group of private citizens⁴ in St. John's who in 1934 approached the government with a request for a grant of land and financial assistance to resettle some ten unemployed families from St. John's to Markland in the central part of the Avalon Peninsula about sixty miles from the city. The government agreed and on April 30, 1934 the ten families⁵ were moved from St. John's to an area about one mile south of Whitbourne where they first camped, and undertook the building of houses and the clearing of land. By the end of June 1934, this brief experiment was already regarded as successful and the government urged the Markland Board of Trustees to expand the scheme as quickly as possible. The trustees agreed on condition that a full time manager be appointed who would give his entire attention to the development.

Shortly after the first settlement was begun, certain of the commissioners, notably Thomas Lodge and Sir John Hope Simpson, became very enthusiastic about the developmental possibilities of the movement and were able to convince the other Commissioners as well as the United Kingdom government that land settlement offered the only solution to the problems of unemployment and dependence on relief. The trustees shared a similar viewpoint. In an "Interim Report on Markland"⁶, dated December, 1934 they write:

By the end of June it was clear that the question of the moral recovery of men of this class presented no difficulty which could not be overcome. Temperamental failures there might be, but the percentage of these could not, on the realized facts, be high enough to endanger the success of either the particular experiment itself or of a considerable extension thereof. ... It therefore appeared to the Commission very desirable that the scale of the experiment should be extended as far and as fast as the available organization would allow (FOC/NA/129/1934a).

In July 1934 the Commission of Government submitted a memorandum to the Colonial Development Fund requesting a loan⁸ to establish a series of land settlement and colonization areas throughout Newfoundland, modelled upon the one already started. Sir John Hope Simpson visited England during the summer of 1934 to **support** the request contained in the brief and succeeded in securing a loan to finance the scheme. In January 1935 the government announced that it was embarking upon a major programme of land settlement, following the Markland model. The members of the Board of Trustees, together with the Commissioner for Natural Resources, continued to act as government agents and to be the managing body for land settlement. In September 1935 the responsibility for the creation of land settlements was transferred to the Department of Public Utilities.⁹ About this time the management body came to be called the Land Settlement Board. (FOC/NA/131/1937a).

The scheme was continued throughout 1935 and 1936. Markland was expanded to about 120 families and four

additional settlements were undertaken containing about one hundred families altogether. The latter represented only about one half the minimum number of families proposed by the Government in their brief to the Colonial Development Fund Committee (FOC/NA/129/1934b). Besides finding that the scheme was accomplishing little to alleviate the problem of unemployment, it was soon discovered that the costs of maintaining settlers, land clearing, administration and settlement development were soaring far beyond the maximum cost anticipated in the initial proposals. Moreover, it became a matter of concern to government whether or not the settlers involved in schemes already underway could ever be brought to a position of self-independence.

Government enthusiasm towards the land settlement movement waned from 1936 onward. Lodge maintained a hope of optimism for eventual success. On July 16, 1936 he wrote:

Inexorable physical facts in Newfoundland will postpone the extraction of a complete living from the land for some years. Therefore for x years the family must be kept. If during those x years the family is producing an adequate real value in the shape of cleared land it is entitled to a living which corresponds to the work done and the real value produced (FOC/NA/142/1936b).

In March 1937, shortly after the Hon. Mr. Lodge's term of office had expired, the government proclaimed that the land settlement program could not be continued on the

lines being followed thus far. The Land Settlement Board was disbanded and full control of existing settlements assumed by the government under a newly constituted Department of Rural Reconstruction (FOC/NA/131/1937a). The chief reason for the cancellation of the land settlement scheme was outlined by Governor Walwyn as follows:

Settlements started on the basis that Government pays regular maintenance to all the settlers and bears all the costs of administration and equipment tend, as experience has fully proved, to be unduly expensive. We are agreed that this method of dealing with one aspect of our social and economic problem is beyond the financial capacity of the country to afford, even in permanent success could be assured. We are not yet in a position to indicate definitely the policy which we intend to follow in future (FOC/NA/130/1937b).

By this time the government had already been giving active consideration to means of undertaking long term programs aimed at reconstructing and strengthening the economy of the islands, other than that of land settlement. Late in 1937 the government acquired the services of Mr. J.A. Hanley, Professor of Agriculture and Rural Economics, from the University of Durham. Although the main purpose of Professor Hanley's visit to Newfoundland was to study the agricultural possibilities of the eastern part of the island, on request of the government he visited three of the land settlements and submitted a report¹⁰ outlining some difficulties and suggesting reforms. In 1938 a second expert, Mr. J.H. Gavin, from the British Ministry of Agriculture, spent the greater part

of the year investigating conditions around the island to prepare a program of rural reconstruction. He too visited the land settlements and prepared two reports,¹¹ one dealing specifically with land settlements and the other with the whole subject of rural reconstruction of which a program of land settlement was considered to be an integral part.

Based upon the recommendations contained in the Hanley and Garvin reports, in January 1939 the Department of Rural Reconstruction implemented a three-year plan to revise the land settlements begun under the Land Settlement Board, and to sponsor as part of a rural reconstruction scheme a type of small-holding land settlement. Under the latter programme three settlements were completed containing about 85 families. The final withdrawal of the government from active participation in the land settlement scheme by the end of 1942, on the one hand reflects to some extent the successful implementation of the goals established in the three-year plan. On the other hand, shortly after the time the three-year plan had gotten underway, World War II had started. Large scale enlistment and increasing employment opportunities rapidly dispelled unemployment and relief problems. In this situation rural reconstruction and land settlement schemes were largely redundant.¹²

CHAPTER II

POLITICAL, ECONOMIC AND SOCIAL INTERACTIONS AFFECTING LAND SETTLEMENT DEVELOPMENT

Introduction

In attempting to assess the development of state-sponsored land settlement programs it is necessary to probe the political processes which have contributed to the phenomenal content of the area under investigation.¹ The selection of settlement sites, the choice of settlers, land clearing and development procedures, management, financial and technical assistance, social and economic objectives represent variables that affect settlement development and may thus be classed as political variables. Modification or alteration in any of the political variables can alter the direction of settlement and create situations either favorable or unfavorable for development.

In the foregoing section it was seen how the general policy on land settlement of the Commission of Government evolved throughout the period 1934-1942, and how the scheme was first encouraged by the Government through a voluntary group of trustees, but finally brought completely under state control. This section deals with the methods used to implement development policies in the land settlements during the construction phases.

Site Selection

Each of the land settlement schemes undertaken in Newfoundland was located in a woodland area previously unsettled. There is no evidence available to indicate that any more than a cursory survey was ever conducted in any site selected either as to the suitability of the soil for farming or the availability of land for future settlement and development. The only two established criteria that were followed with any consistency were that the settlements were mostly located on land controlled by the state and that heavily-timbered areas were assumed to offer a reasonable index of the soil suitability for farming. That no consistent or systematic plan was followed is clear when the circumstances surrounding the selection of each individual settlement are examined.

The Markland settlement was selected by the Board of Trustees who, with the help of several of the first ten settlers, made a search for suitable and accessible land in the Crown Lands Office (Smith, 1969, pers. comm.). The area selected consisted of a thirty-nine square mile block of land along the Whitbourne-Colinet road about sixty miles from St. John's. Although much of the area consisted of bogs and marshes, these were interspersed with wooded till ridges. The first and all subsequent land clearances and settlement were effected on these timber lands. In reply

to many criticisms of the settlement location Lodge stated that it had to be situated on the Avalon Peninsula because the main relief problem was on that part of the island and that the experiment needed to be within reasonable proximity to the seat of government to ensure detailed supervision (Lodge, 1937:67).

In presenting its brief to the Colonial Development Committee for financial assistance, the Commission of Government stated that four new settlements were to be started at strategic points on the North, South, East and West Coasts.

The exact areas have not yet been determined, but investigations will be made during the coming Winter and Spring. Areas in the vicinity of Port au Port and Lomond have been surveyed and inspected for available land, and favorable reports have been received (FOC/NA/129/1934b).

The proposed settlement at Lomond was never begun, but one was undertaken near Port au Port, though apparently not on the site suggested above. During the visit of Sir John Hope Simpson to England in 1934 he apparently met with the Roman Catholic priest, Rev. Fr. M. O'Reilly, of the Parish of Lourdes on the outer coast of the Port au Port Peninsula, who was on holiday in Ireland. Together they apparently discussed the Markland project, and entered into an agreement to promote a similar colony at Lourdes. During the autumn of 1934, that is, prior to the approval of the Colonial Development Loan, the Department of

Natural Resources advanced financial assistance to the priest to resettle ten families from the south coast of Newfoundland to Lourdes.² In August 1935, the scheme was taken over by the Board of Trustees, the number of families was increased, and a land manager appointed. The Trustees, apparently without adequate information of what had previously transpired at Lourdes, instructed the manager to locate the land settlement on government controlled land, situated to the east of the old settlement of Lourdes. Upon his arrival the manager discovered that a number of houses had already been constructed and land clearing was underway around the vicinity of the church. He proceeded to direct the construction of the settlement outwards from and adjacent to the central area already established (Warren, 1969, pers. comm.)³

Parallel with the expansion of Markland and the beginning of a land settlement at Lourdes, new locations were sought to accommodate needy families who had applied to enter the scheme. During the winter of 1935 a logging operation was started on a site along the Salmonier Line in the central area of the Avalon Peninsula to the east of the Markland settlement in preparation for a land settlement to be named Vinland. According to Warren (1969, pers. comm.) the site was chosen when the ground was covered with snow. This observation is substantiated by a press report on February 7, 1935:

The Government and trustees ... are now considering the establishing of a new colony to be called Vinland, to be located on the Salmonier Line. Last week a Government aeroplane flew over the proposed site and viewed its possibilities from the advantageous perspective of 2000 feet up.

(Observer's Weekly, February 7, 1935, p. 3).

During the following spring, it was discovered that the soils on the Vinland site consisted of very poorly drained associations, unsuitable for tilling. Pressured to quickly find an alternative settlement site for the families to be placed at Vinland, the Board of Trustees selected an area adjacent to the existing village of Haricot⁴ at the head of St. Mary's Bay, apparently against the better advice of the Division of Agriculture. The Haricot land settlement consisted of a small area of alluvial deposits along the mouth of the Haricot River and the side of a steeply sloping river bluff. The construction of a land settlement began here in September 1935. Of all the land settlement locations, that of Haricot proved to be the most problematic. In that settlement selection and construction predated any adequate survey of available land, it was later discovered that the amount of land suitable for agricultural reclamation was very limited. In a report to the Secretary of State, dated October 13, 1937, Governor Walwyn comments

Haricot at the head of St. Mary's Bay presents a more difficult problem than the others. The site of the settlement was ill chosen from the point of view of available land and a report from the Director of Agriculture indicates that not more than 100 acres of land are available at a maximum... The future of this settlement therefore remains in doubt (FOC/NA/130/1937b).⁵

A slightly more systematic approach in site selection was followed in the founding of the next two land settlements at Midland and Brown's Arm. In both instances some consideration was given to a potential market for farm produce and alternative sources of employment, apart from the general suitability of the areas for settlement. According to Chafe, (1969, pers. comm.)⁶ in the early spring of 1936 the Land Settlement Board sent two of the young men who had been in training at Markland to become managers of new land settlements, one to the Grand Falls area and the other to the Corner Brook area, each to select from among several suggested sites a location for new land settlements. Proximity to the Corner Brook industrial area for the one, and to the Grand Falls industrial area for the other, were considered as a basic principle in the selection to ensure that the settlers would have an opportunity to obtain winter employment in cutting and hauling pulpwood for the respective paper companies in each area and a market for any surplus farm products. Although both managers were accompanied by officials from the Division of Agriculture, who were sent to offer their advice, the final decision in the selection of both Midland and Brown's Arm was made by the Land Settlement Board through their appointed land managers. The Brown's Arm land settlement was started in June, 1936 in a woodland area to

the south of the old settlement of Brown's Arm in Notre Dame Bay on the eastern side of an inlet leading to Botwood. At the same time the Midland settlement was established in a heavily wooded area approximately midway between the towns of Deer Lake and Corner Brook, and one mile south of the Newfoundland Railway. (FOC/NA/130/1937b).

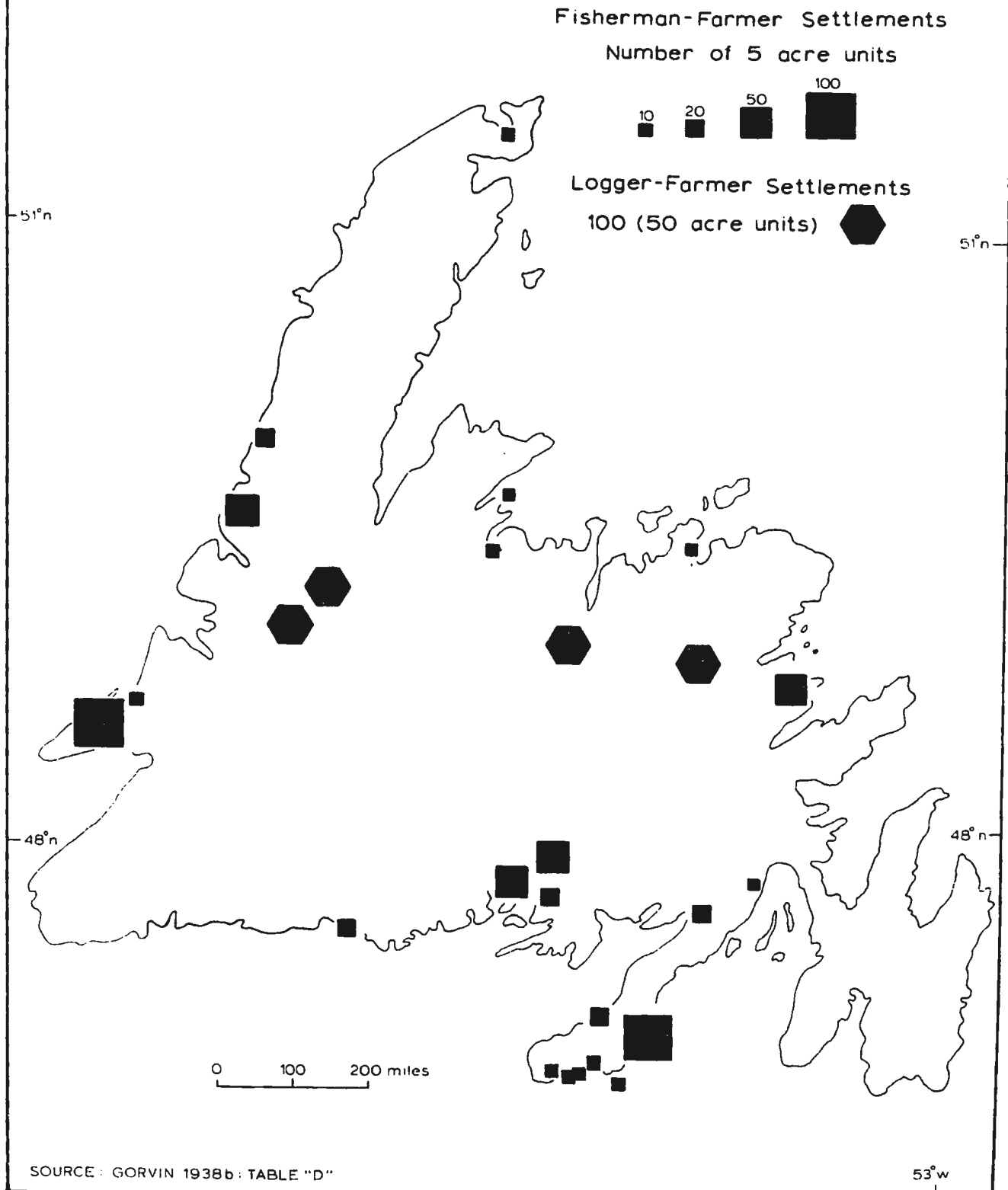
It is evident that the choice of locations in the first five land settlements was based largely upon a brief reconnaissance of the general terrain and forested conditions in areas of crown land reported to possess good potential for farm settlement. Towards the end of 1936 an attempt was made to identify areas suitable for land settlement on a more rational basis than that previously followed. This attempt took the form of a survey conducted under the direction of District Magistrates in three areas of the island as follows - Harbour Breton to Lamaline; Lamaline to the bottom of Placentia Bay, including the islands of Placentia Bay; and in Bonavista Bay from Freshwater Bay to Clode Sound, including the islands of Bonavista Bay. The three survey parties were asked to determine where land was suitable for reclamation, the area of such land and the number of families in the district requiring help who had able-bodied members capable of working the land (FOC/NA/175/1936c). No immediate action followed the submission of the Magistrates' reports, although two of the land settlement areas suggested were surveyed and settlements started

under the three-year plan in 1939, one on the Burin Peninsula at Winterland and the other on the Eastport Peninsula in Bonavista Bay at Sandringham.

In his "Interim Report on Rural Construction" Gorvin (1938) recommended the establishment of small holding settlements at some twenty localities, subject to further surveys and road construction (Gorvin 1938^b, Appendix IV, Table D, p. 56). The proposed localities of these settlements are shown in Figure 2.1. Apart from the two settlements suggested in the Magistrate's (1936) Survey, the government through the Department of Rural Reconstruction's three-year plan started development on only two others, one at Point au Mal on the eastern side of Port au Port Bay and the other at Maryland in Creston North. Despite the fact that a more cautious approach was exercised in choosing land settlement areas in the small-holding developments than during the first five land settlements, the main criteria for selection remained basically the same. There is little evidence to indicate that soils were examined in any detail or that any considerations were taken of local climatic conditions. Generally, the site selection was determined from the nature of the terrain, the type of forest cover, the area of the forest, and from areas where land development was not seriously impeded by land tenure complications, that is, on state-owned property.

Figure 2.1

COASTAL AND LUMBER AREAS FOR SMALL HOLDING
SETTLEMENT (proposed in 1938 Rural Reconstruction Program)



Settler Selection

Except the Lourdes Land Settlement, where the choice of settlers was made by the Roman Catholic Church, and involved the removal of some 28 families from a single Roman Catholic Parish on the south coast to the Port au Port Peninsula, the selection of settlers for the first five land settlements proceeded without any established plan. In a sense the first Markland settlers selected themselves, although ultimately the responsibility for their placement rested with the promoters of the settlement, that is, the Trustees and the Government. In expanding this particular project and in selecting families for Haricot, Brown's Arm and Midland, two main criteria were used: (1) that the family was to be unemployed and in receipt of welfare, and (2) that an able-bodied unit was to be available for work. In their 1934 Interim Report, the Board of Trustees outline the method used to select Markland settlers.

The men are chosen in order of application. Their circumstances are enquired into and no applicant, who, in the opinion of the Trustees, has a chance of proving successful is refused. The Trustees in making enquiries into the circumstances of the applicant do not ask and have in no case been informed as to the religious persuasion of the applicant (FOC/NA/129/1934a).

During the initial stages the Markland scheme was highly publicized by press and radio. The news of its success apparently spread rapidly in the distressed areas of the island and offered a hope for economic security to

thousands to whom there was no other alternative. Before the end of 1934 over 2500 families applied for admission (FOC/NA/129/1934). Operating on the assumption that the areas selected contained the necessary physical conditions to establish farming, the further simple logic was applied that under the stimulus of hope and a desire for an independent existence, unemployed men could transform the area into a viable economic settlement.⁷

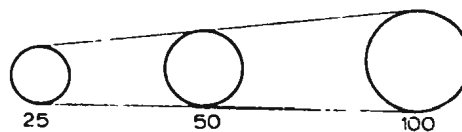
In the first five settlements the selection of families for colonists from among the depressed regions of the island was conducted within liberal limits of population characteristics such as age, family size, occupational skills, and religious affiliation.

Similarly, except for Lourdes, the pattern of resettlement according to origin and cultural composition was conducted within broad limitations, and without any clearly defined plan. Figure 2.2 shows the period of migration, numbers of settlers by origin and destination. The period of migration is indicated by dates within the flow lines; the number of settlers, according to regional origin by proportional circles, and the number of families moving by the proportional widths of flow lines. The data mapped are complete for all settlements except Markland where the author was only able to trace the origin and migration of 107 families (89 per cent) from the 120 families resettled there up to the end of 1935.

Figure 2.2

NEWFOUNDLAND LAND SETTLERS Regional Origin and Migration Patterns 1934-1940

Numbers of families by regions

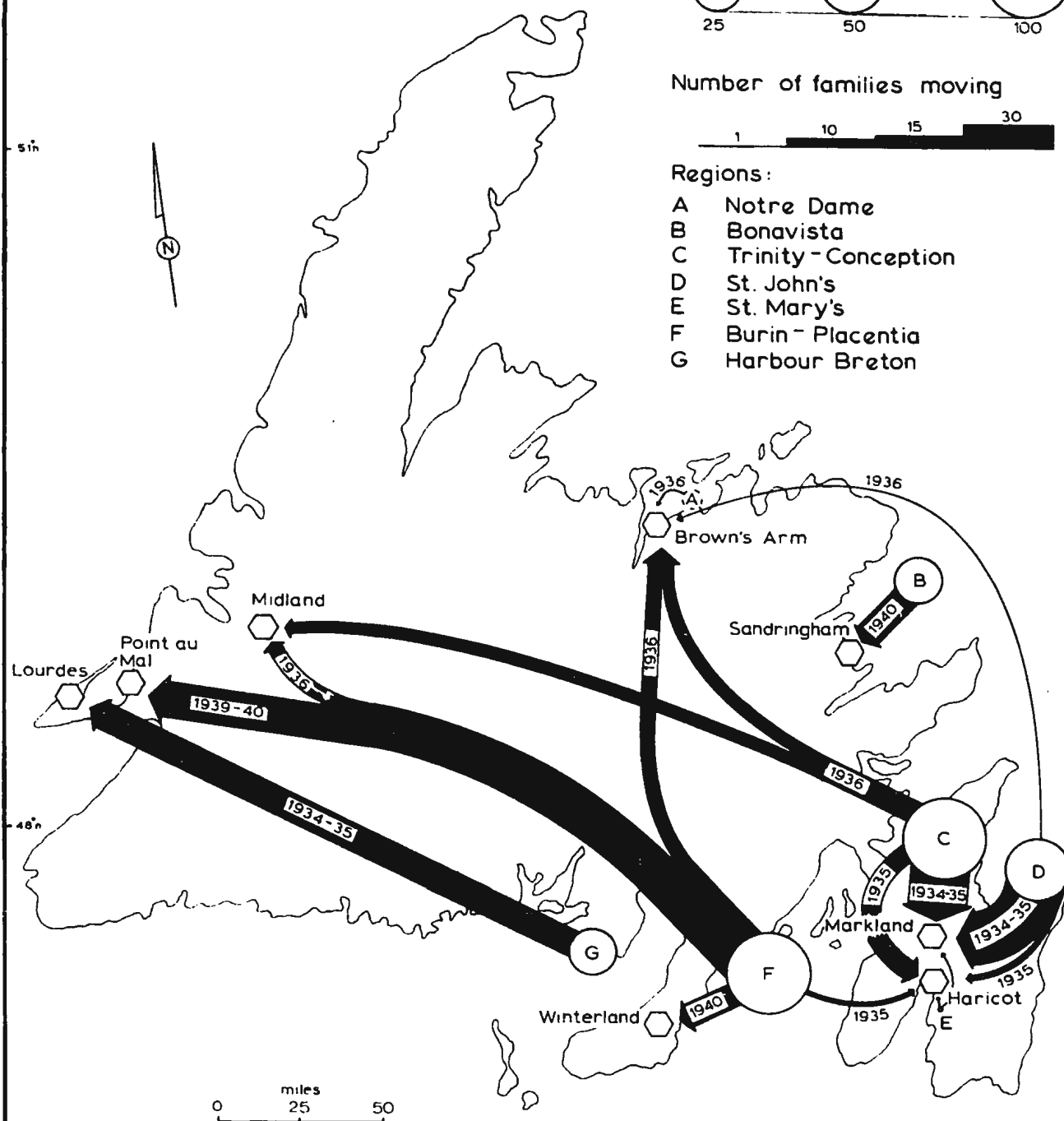


Number of families moving



Regions:

- A Notre Dame
- B Bonavista
- C Trinity-Conception
- D St. John's
- E St. Mary's
- F Burin-Placentia
- G Harbour Breton



Generally the regions supplying the majority of the settlers were St. John's, Placentia Bay-Burin Peninsula, and the Trinity-Conception, that is, the regions where unemployment and relief problems were reported to be most distressing. Smaller numbers of families were drawn from the Harbour Breton, Bonavista Bay and St. Mary's Bay regions. Although three of the settlements were situated on the western side of the island, none of the original settlers were selected from that region. Similarly the Notre Dame Bay settlement at Brown's Arm was begun with but a single family from the local district.

The year of the various settler migrations is indicative of the general changes of orientation and purpose for which the land settlement scheme was employed. What began as a program to alleviate unemployment first in St. John's and later in towns around Conception Bay in 1934, had evolved by 1935 into a scheme to ease economic distress in the Placentia Bay-Burin Peninsula region and along the south coast. In 1936 the land settlement scheme was firmly a measure to deal with rural unemployment as seen by the origin and migration of families to Midland and Brown's Arm. During the second period of land settlement with the beginning of Sandringham, Winterland and Point au Mal in 1940, the program had become strictly rural oriented. The choice of Winterland and Sandringham settlers in regard to origin represents a departure from earlier policy. Whereas

the pattern of selection for Point au Mal provides a parallel with the earlier settlement at Lourdes, in that settlers were selected from one region and resettled some considerable distance from their homes, the settlers at both Winterland and Sandringham were drawn from districts within which the settlement sites were located.

The criteria for settler selection in the small-holding land settlements were more clearly defined than in the earlier schemes. The small-holding land settlements, or the fisherman-farmer/farmer-logger settlement projects, were implemented in part to solve the problem of unemployment, but as part of the program in a total rural reconstruction development, were envisaged as a means to solve underemployment. For the latter reason it was possible that families could be selected who were hard pressed in their present means of livelihood but not necessarily in receipt of welfare assistance. The majority of settlers chosen for the small-holding settlements appear to fall within the category of the underemployed rather than the unemployed, particularly those settler families moving in 1940 to Winterland and Sandringham.

Another contrast between the selection method of the Land Settlement Board and the Department of Rural Reconstruction concerns religion. Whereas the former selected and placed settlers without any regard for the religious persuasion of the settlers or for the

denominational characteristics of settlement in the areas where the land settlements were located, the latter made an effort to screen applicants in order to make each settlement a unidenominational community, corresponding with the general or dominant religious structure of the locality. For instance, settlers who were placed at Point au Mal were exclusively adherents of the Roman Catholic Church and were resettled into a predominantly Roman Catholic region. The choice, based on religious affiliation, also specified Church of England families for Sandringham and United Church families for Winterland. In reality the Sandringham and Winterland settlements were not as uniform, according to religious persuasion, as the screening process would tend to suggest, and in each instance a few non-conforming families were admitted.

A further departure in the principles used to choose settlers in the 1934-1936 settlement as compared with those undertaken in 1940 hinged upon the definition of able-bodiedness and health of applicants. Various references to the physical condition and mental attitudes of settlers at Markland and Haricot tend to suggest that some formed very poor human material to undertake the heavy work of pioneering and adapting to a new way of life. For example, in 1934 the Trustees report:

The physique of the men has been lowered through deprivation and suffering.... In many instances it was found that those who had been receiving Government assistance had lost all feeling that they should give an honest return for wages paid by the Government (FOC/NA/129/1934a)

Commenting on the departure of ten Haricot families, a Department of Natural Resources official writes, on October 13, 1937

There were originally 25 families as settlers. Owing partly to improvement in the industrial position in Conception Bay and partly to the selection of unsuitable persons as settlers, a considerable number of settlers have left to take up other work (FOC/NA/130/1937b)

Small-holding settlers were required to undergo a medical examination before being accepted and then were permitted entry on the understanding that their first year represented a period of probation. (FOC/NA/81/1944). Various entries in a diary kept by a land settlement official during the initial development stages at Sandringham, which the author was permitted to examine and quote, indicate that the screening processes used to determine suitability of settlers generally conformed with the regulations established. See entries dated (1940) March 19, April 10, April 16, June 26, June 27, July 11, July 24, July 26, Appendix A.

Land Clearing and Settlement Building

The transformation of woodland areas into farm settlements naturally required land reclamation both for the purposes of farming and establishing the other physical aspects of settlement, such as roads, houses and schools. In the typical pioneer and voluntary type of settlement this work normally requires painstaking effort over a great number of years or even generations. In the Newfoundland land settlements it was anticipated that government assistance would greatly shorten the time factor and effect successful settlements within two years in the first five settlements, and within three years in the small-holding schemes. Whereas the former settlements took between six and seven years before government could withdraw management and financial support, the latter were completed close to schedule. Not the least among the factors that account for the relative success of the later settlements as compared with the earlier projects was the difference in land development policies. Rather than divide the settlements into groups based upon the time of origin, it is perhaps more convenient to consider land clearing and development procedures in time phases, since the major policies that influenced the development of the small-holding settlement were basically the same as those used to revise the earlier settlements under the three-year plan devised by J.H. Gorvin.

All land settlements had in common the fact that settlement development proceeded as a single phased operation. Land clearing, soil improvement and cultivation, house building, road construction, the construction of community buildings and services, represent operations that were conducted in overlapping time sequences, for varying periods of time. Land reclamation and farming, for instance, continued throughout the entire period of state-sponsorship even though sporadically and with the normal seasonal variations.

At an early stage in the development of Markland the Trustees and the Government instituted methods of land clearing with the use of tractors and group labour. Working under the direction of supervisors, settlers cut over land, burned brush, and with the aid of mechanical equipment pulled stumps, removed stones and prepared the land for cultivation. Up to about the end of 1937, the promoters insisted upon land reclamation primarily on a communal basis. The envisaged modes of land utilization were divided into two categories (1) community land and (2) individual farmsteads. Central farming areas within each settlement, worked on a communal basis, it was believed, would enable each project to liquidate the cost of construction and at a later stage could form the resource base for a venture into commercial agriculture. Individual farmsteads were intended to provide the basis of subsistence

family production from vegetables and livestock (FOC/NA/129/1934a). Except at Lourdes and Brown's Arm, where individual managers appear to have interpreted the objectives of the Land Settlement Board in a very liberal manner and proceeded to clear land primarily on an individual basis, the principle of community effort in the establishment of central farming areas, was not relaxed until 1937.

Hanley concluded that the chief factor delaying the withdrawal of government assistance was that insufficient land had been prepared. He recommended that land clearing should be established on a commercial basis, by an experienced set of paid workers with adequate equipment, and handed over to individual settlers (Hanley 1937:51). The Markland and Haricot experiences particularly had revealed that the sharing of labour in the reclamation of central farming holdings was a mistaken idea:

Up to the present time there has been a rigid insistence upon the clearing of community lands. As a result of experience, however, it is clear that better results can be obtained by giving precedence to the clearing of individual holdings. The people are definitely individualistic and it is a matter of difficulty to induce them to work really hard at the clearing of property which is, even for the time being, communal (FOC/NA/131/1937a)

A further major revision in land clearing policy was urged by Gorvin who contended that "the main development of the settlements should have been on the basis of individual

lots." (Gorvin, 1938a; 14). Insofar as implementing new land clearing and development policies went, these had to be focussed upon salvaging settlement within the limits of the physical and human resources already selected and subjected to experiment under a differing set of ideas. Gorvin claimed it was difficult for any family in Newfoundland to become independent of Government assistance by farming on less than fifty acres, of which one half could furnish the arable and grassland and the other half be maintained as a woodlot. For the dual-purpose settlement, that is the farmer-fisherman, or small-holding type, it was maintained that holdings need not exceed ten acres (1938a; 7-8). By contrast, the early promoters had no definite plan as to what acreage might be suitable, as illustrated by Thomas Lodge's statement

We do not know on what acreage of cleared land an average family can hope to secure a living. It may be as low as 5; it may be as high as 10. If we take the lower figure, to deal with 6,000 families, we have to find 30,000 acres. (FOC/NA/139/1936a)

In all settlements initiation of work was characterized by the male heads of families preceding their families onto the site to assist in land clearing and the construction of buildings. Temporary accommodations were provided for these settlers in bunkhouses. Except for the dwellings constructed at Lourdes and some of the earlier houses at Markland, which were entirely built by the settlers themselves, the most common method of house

construction was by contract. The approved house types consisted of a small-framed, single storey, two- or three-bedroom cottage, depending upon family size. The contractors usually completed the cottage within two or three days to the stage where it was "wind and water proof", and completed the interior the kitchen and one bedroom. At that point settler families were moved in, and were expected to complete their living accommodations on their own time, with materials supplied by the land settlement saw mill and the settlement supply store. In the earlier settlements no provision was made to encourage or direct the construction of barns, poultry houses, root cellars or other outbuildings on individual homesteads. Initially horses, and in some cases cows, were kept in community barns at government expense. The community barn, tractor garage, supply store, school building and staff house formed the nucleus of settlement services provided during the construction period.

The discontinuance of community farming, and the intensification of individual effort in the development of individual holdings marked the most significant change in policy between the Land Settlement Board schemes and that instituted by the Department of Rural Reconstruction in the three-year plan of revision and in the building of the small-holding settlements. Bonus schemes were introduced; some being paid in cash, others in kind, for specific

pieces of work done by each settler on his own behalf. Land clearing, approved cropping, barn building, fencing, the construction of poultry houses and root cellars, were items each carrying a cash value to encourage self-help. Land reclamation was still largely performed by tractors and mechanical equipment to do the heavier work of hauling stumps, removing boulders, and giving the ground an initial ploughing. The main objective of the new policy was to speed up land clearing to allow each settlement to arrive at a stage of self-sufficiency (FOC/NA/81/1941). Even in settlements, such as Brown's Arm, where management did not insist upon community clearing but where the scheme lacked financial incentives, the beginning of the three-year program marked a period during which the improved land was greatly expanded. In those settlements where communal effort had prevailed, the faster rate at which land was improved was even more pronounced when compared to the years before 1939. The three-year program of land reclamation and settlement construction was initiated in the small-holding settlements in June 1940, and at the end of 1942 the average improved acreage per family approximated that of the earlier projects.

Management

The administration of state-sponsored settlement projects is usually conducted at two levels, the central government level and the settlement level. It has been mentioned that the development of policy and control over the land settlement scheme in Newfoundland began with a voluntary group of sponsors in 1934 but gradually became more and more government oriented until 1937 when the whole subject came entirely under state control. Among the various political influences that affect land settlement projects, one of the most critical is the system of management and the calibre of the managerial staff, more particularly that of the manager in the field. To the manager was entrusted the responsibility of implementing government plans (or ideas), to develop the physical aspects of settlement, to supervise the settlers and to exercise overall control. Apart from the need to be thoroughly conversant with the technical aspects of settlement development, the land manager was generally required to possess both the qualities of the pioneer and the diplomat, to play the role of trusted adviser to the settlers in his charge, and to make independent decisions on matters peculiar to his project.

The system of settlement management adopted in the Newfoundland scheme remained essentially the same throughout

the life of direct government sponsorship, and followed the basic pattern established by the Board of Trustees in the early months of Markland. The entire management of each settlement was entrusted to one man, assisted by an accountant whose function it was to keep records, order supplies and operate the government store. Each of the earlier settlements had assistant-managers; however, these were dispensed with after 1938 on the recommendation of Gorvin (FOC/NA/81/1941)

The main group of men whose responsibility it became to direct and supervise land settlements was selected from graduates of Memorial College, an educational institution in St. John's which was the predecessor of the Memorial University of Newfoundland. During the summer of 1934 ten of these students were sent into the field to work under the supervision of Mr. R.H.K. Cochius, the Markland manager and himself a member of the Board of Trustees (FOC/NA/139/1934). At Markland each student was placed in control of separate activities to acquaint him with the working of the project. As each new land settlement began, the managers and assistant-managers were appointed from among these trainees. Unfortunately most of the managers had not gained experience beyond the point of participating in directing men to clear land when they were required to assume responsibility of directing a new settlement. This, plus the fact that they had been selected solely on the

basis of educational qualification rather than their experience in, or knowledge of agricultural practices or land settlement, did little to ease the burden of responsibility placed upon them. Based upon a few months of experience at Markland, under the direction of a man whose own training and background lay in landscape design and road engineering,⁸ rather than in settlement and agriculture, the first land settlement managers were sent to the various sites approved, and expected to engineer within two years, at modest expense, the transformation of poverty stricken families drawn from varied backgrounds into self-sufficient, self-supporting individuals.

The inexperience of the managers and their lack of agricultural training formed the basis of one of the main criticisms of the land settlement scheme by both Hanley and Gorvin. The former comments:

I have nothing but admiration for the work done by the young managers at these settlements, but it does need some much more effective guidance than is at present available. These men should have good practical agricultural knowledge, as well as an ability to guide and direct settlers in their efforts at clearing and cropping new land
(Hanley, 1937; 48)

Gorvin added a similar assessment

In no one case were these men equipped with any knowledge of the functions which they were to be called upon to perform. It is a point in favour of choosing these men that they were, in general, of a fairly high standard of education, and their duties in the early stage of settlement consisted almost exclusively of being able to lead men to undertake woodland clearing. But these early operations had

to be followed quickly with preparation of the soil and selection of the areas to be cleared subsequently, and in these matters they were almost completely ignorant (Gorvin, 1938a; 12-13)

Except to follow the procedures seen at Markland and to observe the general principles established by the Land Settlement Board, the land manager had little else to guide him in developing a settlement. He had no specific guidelines to follow, no settlement plan, and little expert advice to rely upon. Success depended in large measure upon the manager's initiative, ability, and many elements of chance. As late as 1937 Hanley found that the Markland settlement was still being managed without any specific objective and no plan as to what the settlement would eventually look like (1937, p. 49).

During 1939, ten of the managers and assistant-managers who had participated in the first five land settlements were sent to agricultural colleges in Canada. In 1940 they returned and assumed direction of the three-year plan of revision and the building of the small-holding settlements (FOC/NA/81/1941). The system of management and the responsibilities remained essentially the same as in the earlier period; however, most of the managers had now both experience in land settlement and training in agriculture, as well as a definite plan of action and yearly objectives to achieve.

Maintenance

A fundamental problem associated with all pioneering efforts, whether state-assisted or not, lies in the provision of the essential elements of human life, namely food and shelter, during the interim period of developing an adequate means for securing a livelihood. In state-supported schemes, government usually provides the essentials of life, or selects settlers who have the necessary capabilities to sustain themselves. The mode of settler maintenance adopted by the Commission of Government in Newfoundland was characterized by the provision of small wooden cottages upon entry, and food and clothing allowance to support the family during the stage of construction.

The extreme destitution of many of the settlers chosen for the first five land settlements made it necessary for the Land Settlement Board to institute a program of relief assistance. Many settlers went into the settlements without any worldly goods of any kind. Some had to be provided with clothing before they could even proceed to begin work. A large proportion were unable to allow children to leave the home in cold or damp weather because they were so scantily clad (FOC/NA/129/1934a). Apart from having to supply food and clothing, the government had to underwrite the cost of essential household furnishings such as stoves and beds.⁹ In the instance of Lourdes most

settlers transported whatever moveable possessions they were able, including livestock. The majority of settlers moving to Markland, Haricot, Brown's Arm and Midland arrived at their respective settlements with a few personal possessions such as the clothing they wore, and household cooking utilities.

The system of maintenance adopted, save for the initial grant of a house, household furnishings and family clothing, was the standard program of relief assistance laid down for the island. No wages were paid to the settlers but rather each family was permitted to take goods to a certain value from the government store. The rate of maintenance established by the Trustees was based upon Government relief for St. John's families, and amounted to approximately \$400 per year for a family of five, or about four times the relief rate for a family of comparable size in the rural or outport sections of the country (Gorvin 1938a; 15).

The relatively small margin in income between men on work and men on relief, according to Gorvin, did little to encourage self-help or speed the settlers to seek independence. Undoubtedly some were attracted by the relatively favorable standard of living which the maintenance system offered.¹⁰ In 1938 Gorvin recommended that the scale of maintenance be reduced to the rate of outport families, paid in cash rather than in kind, and that

additional assistance be provided in the form of bonuses for specific pieces of work (1938a; 15). These suggestions were implemented in the three-year plan.

In return for maintenance each settler was required to work under the direction of the land manager, which in the early years of Markland or Haricot meant working on community projects such as farming, land clearing, road building, and sawmilling, or as in Sandringham and Winterland in working on one's own holding as directed, assisting other settlers, or participating in group projects. As part of the general maintenance system, medical services were usually arranged with doctors or nurses stationed in neighbouring communities (FOC/NA/129/1934a; see also entry dated June 3, Appendix A).

Socio-Economic Features of Traditional Newfoundland Settlements

Before considering what type of social and economic units the promoters of the various land settlements anticipated would emerge from their experiments, it might be useful to delimit some of the distinctive socio-cultural patterns characterizing the main group of settlements which had evolved in Newfoundland, and which typify to a large extent the settlements whence land settlers were drawn. Primarily settlements were coastal, and were established initially to pursue fishing activities. Inland settlements were, and still are, few. The main group of non-coastal

settlements represent a movement of relatively recent times, mostly since 1900, in response to the development of lumber, pulp and paper, transportation and mining industries. Although the origins of most settlements can be related to the efforts of settlers to exploit a primary resource, such as fish or lumber, the changing nature or depletion of resources, technological innovation, social and economic changes both within the settlement region and on the island generally, have interacted to greatly modify the character of the initial habitat and adaptation. The most common pattern of adaptation in outport settlements in Newfoundland until the last few decades was one featuring the engagement of the work force in multiple occupational and resource exploitation activities, and primarily at a subsistence level.

Commenting on the social and economic conditions as he found them in the coastal areas of the province in the summer of 1938, J.H. Gorvin writes of the South Coast:

Fishermen and families mostly live on bare minimum of subsistence.... Astonished at their adaptability. A specialist would starve where they live (Gorvin 1938b; 10);

of the East Coast:

The East Coast has the advantages of alternative sources of employment - Labrador and shore fisheries, pulpwood and saw log cutting and mining. On the East Coast the men take an active part in gardening. (1938b; 11);

and on the general pattern of adaptation over the whole of the island

the majority of Newfoundlanders in the outports enjoy advantages not available to the wage earner in industrial centres. He has his own home, free of rent, rates and taxes, and his firewood costs him little. His garden supplies him with potatoes, turnips and cabbage and where he has initiative, a variety of other vegetables and in some areas, fruit. He can in many districts trap rabbits and gather wild berries within easy reach of his settlement. In fact, about half of his food requirements can be had by his own efforts... This high degree of self-sufficiency explains why many men with small families in the settlements can exist on a return from fishing of the equivalent in supplies of \$150 a year. The trouble is that the fishery does not give the majority of families such a return... Without some extra cash assistance from logging, the loading of vessels, working on a merchant's "room" or catching lobsters or salmon, the fisherman and his dependents find themselves in a position little better than that of a man and his family on relief, namely, the equivalent of \$130 a year in supplies (1938b; 12).

Another prominent feature of the pattern of settlement in Newfoundland has been the large number and generally small size of settled sites, scattered in apparent irregularity around the whole coastal margin of the island. Most sites were originally occupied by a handful of families, usually of the same ethnic background and of the same religious denomination. Where more than one religious denomination was represented on a particular site, there was usually a marked physical, as well as a cultural, boundary between the two. Subsequent occupancy due to population growth within most settlements resulted in the

development of extended kin groups living upon land originally squatted by an ancestor, and in closely-spaced, agglomerated, settlement patterns. Whereas kinship tended to agglomerate settlement, religious and other cultural differences tended to separate. Consequently most outport settlements developed either as single denominational communities, or as settlements whose internal spatial features could be delimited on the basis of religious differences. Social life and cultural activities, including education, developed almost exclusively around the various churches.

Although farming as a supplementary, or subsistence, activity within the confines of settlements originally occupied for purposes other than farming, came to play an important role in the economy of outport settlements, only in a few cases where relatively fertile land lay within relatively easy access did it become an alternative to fishing or logging, and only in these cases did farming settlements develop. Examples of areas where farming did supplant fishing as the dominant economic activity can be found in the Goulds area near St. John's, settled primarily by fishing families from Petty Harbour, Witless Bay and Bay Bulls; the St. George's Bay area between St. David's and Heatherton; the eastern shore of Conception Bay and the Eastport area in Bonavista Bay. Even in those areas where

commercial farming did come to play a significant role in the economics of settlement, it was mainly on a part-time basis (Shaw et al, 1955; 30-32). The role of agriculture in the development of Newfoundland's economy up to 1945 is well summed up by R.A. Mackay, who said

Agriculture's claim to recognition in Newfoundland is as a handmaid to other industries rather than as an industry in its own right. (Mackay, 1946; 102)

TABLE 2.1

Number of Persons Cultivating Land
in Newfoundland, 1891-1945

Census Year	Total No. cultivating land	Commercial Farmers	Fishermen and others
1891	37,850	1,547	36,303
1901	42,913	2,475	40,438
1911	43,795	2,915	40,880
1921	38,206	3,227	34,979
1935	39,808	4,226	35,582
1945	35,574	2,809	32,775

Source: Royal Commission on Agriculture 1955, p. 29.

Census returns of the number of persons cultivating the land between 1891 and 1935 (Table 2.1) show that the number of commercial farmers increased in each intercensal

period whereas the total number of fishermen and others engaged in supplementary agriculture tended to vary, increasing between 1891 and 1911, declining between 1911 and 1921, and increasing again before 1935. The significant increase in farming between 1921 and 1935 is in large measure accounted for by a landward movement brought on by unemployment in other industries during the depression. The Commission of Government attempted to encourage this trend through sponsorship of a land settlement program. By the time the 1935 Census was taken, no more than 135 families were in the land settlements started at Markland and Lourdes. Enumerated as commercial farmers, land settlers alone would have accounted for 14 per cent of the increase reflected in the 1921-1935 period for the whole of the island. However, within the time period during which the main group of land settlements were begun, that is between 1934 and 1940, the back-to-the-land movement was reversed. The 1945 census shows that the number of farmers had declined from 4,226 to 2,809, or about one third, and that the number of supplementary farmers declined significantly as well, falling from 35,582 to 32,765.

Despite the fact that agriculture has tended to play a very important role in the development of settlement around Newfoundland, agricultural settlements represent an anomalous and rather insignificant aspect within the context

of the total number of settlements and settlement patterns on the island. The reasons for the lack of agricultural settlements, as ascertained by the Newfoundland Royal Commission on Agriculture 1955, stem from a wide variety of historic, ecological and economic factors (Shaw et al, 1955; 9-48). Traditionally farming has been looked upon as a means of supplementary income from other activities, particularly the fishery. Yet at times when income from other sources have proven to be unreliable, men have looked to the land for stability and security. Such was the motivation for many fishermen, loggers, and miners during the 1930 depression, and such the motivation of the Government.

Economic and Social Policies on Land Settlement

The principles established by the Board of Trustees and approved by the Commission to found the first group of land settlements were as follows:-

- (1) Settlements to be organized as areas to be developed by Trustees under the supervision of such experts, agricultural and otherwise, as the Government will provide.
- (2) The money expended on behalf of each man is ultimately to be repaid to the Government, so that the man himself will be in a position, when established, to claim that he is entirely independent and has earned his independence.

- (3) Every avenue of profit will be explored which in the opinion of competent advisors merits consideration.
- (4) A system of education is to be developed which will make people living in the settlement enjoy to the full the benefit of the life of that place.
- (5) Such area is from the beginning to be so planned that the natural beauty of the entire district will be conserved and enhanced (FOC/NA/129/1934a)

The primary objective of the early program was to secure a livelihood for the unemployed, by whatever means could be found. The main principles, however, were primarily social rather than economic. Farming was regarded as a means to absorb the unemployed, to raise the standard of living, and to restore self-respect and independence, rather than as an end in itself. The suggestion was made that land settlements would tend to encourage the production of the primary needs of the island (FOC/NA/129/1934b), yet this was advanced as a possible advantage of the scheme and not as a major objective.

The land settlement scheme was expected to produce social change not only within each settlement but also over the vicinity in which each project was located. Properly organized settlements it was proposed would have the effect of (1) raising the standard of living in neighbouring

settlements through the diffusion of good ideas on economics, health, education, and the proper community spirit;
(2) destroying the rampant individualism which had persisted over the island for generations, and (3) creating a desire in the people of the island to move from the scattered settlements into large organized places which offered the best advantages for future growth (FOC/NA/129/1934b). The land settlements thus were dreamed of as the means to a new order for Newfoundland society, with new values and new institutions, going far beyond temporary relief for the human elements who were chosen to participate. Thomas Lodge writes

The appeal of Markland is that it is not a mere experiment in land settlement. It is in conception and in execution something far more important. It is an attempt at complete social reorganization. It is a plan for the future as much as, if not more than, for the immediate present. (Lodge, 1936; 66).

For the first few years of the land settlement experiment, especially at Markland and Haricot where the Trustees and Government officials made regular visits, the emphasis was on the development of a new social organization out of which the new economic order was expected to emerge. Communal land clearing and farming typify the social system used to attack the "rampant individualism" of the settlers. The school system introduced marked a radical departure from the denominational system on the island.

Hanley noted that both Markland and Haricot suffered from a complete lack of planning in all aspects except that of schools (1937; 52). In these two he found excellent teaching and curriculum. In contrast to the general pattern of denominational schools and academic curriculum prevalent throughout Newfoundland, two of the settlements sponsored by the Land Settlement Board were introduced to interdenominational folk schools. Based upon similar schools in Norway, the main objectives of the folk schools were to give training to girls in cooking, sewing, knitting and nutrition and to boys in gardening, carpentry and handicrafts, besides giving both regular training in writing, reading and arithmetic. According to one informant, the folk school educational system was intended to improve the health of the children and to extend through the children similar favourable influences upon their homes. Initially, in both Markland and Haricot, children spent the full school day under the control of the teachers who supervised them in cooking their meals and in establishing habits of personal cleanliness and hygiene (FOC/NA/129/1934a).

The Folk School system operated well at Markland and Haricot until around 1940, when the buildings were given over to the churches or supplanted by denominational schools. Folk schools were tried at Brown's Arm and Midland,

but functioned for very brief periods, apparently due to a difficulty in obtaining the necessary qualified staff. In Lourdes the land settlement school was from the outset operated by the Roman Catholic Church.

Even as the individualism of settlers tended to erode and break down any possible success in farming on a communal basis, the denominational factor pressured the interdenominational school systems out of operation. For example, the final blow to the Haricot folk school was struck when the children of one particular denomination were withdrawn and sent to a denominational school nearby.

During the period of depression when quick results were demanded, the experiments to effect social reorganization soon became very impractical, as well as expensive. The more extensive the reforms attempted, the more often the promoters appear to have created problems. Settlers who were seeking economic security, found themselves in the midst of an experiment, which they were all too willing to accept and participate in at first, but which they could neither understand nor appreciate. Some were willing to accept the favorable maintenance allowances and the relative security which it provided; others came to believe that they would never find economic and social security and independence and left. While the reason why families entered a land settlement was usually very simple and in

common with others; the reasons for remaining or leaving were much more varied and complex.

While each project was given the title, land settlement, which by inference and definition implied that it would have an agricultural aspect, it was not determined nor planned as to what that particular agricultural aspect would be. The principle that "every avenue of profit will be explored" makes the issue even more clouded and uncertain as to what the intentions were. Hanley stated "nobody seemed to have worked out exactly how cleared land could be made to bring in returns which would render settlers independent of Government assistance" (1937; 8).

The major principles of the new policy adopted for the three-year plan to revise the early land settlements attempted to shift the emphasis from social reorganization to economic rehabilitation. These principles were

- (1) to enlarge holdings, enabling pasture and hay lands to be established with a view to raising livestock.
- (2) to organize settlements along co-operative lines, including the organizing of settlers into co-operative study clubs, credit societies and registered co-operative societies
- (3) to replace community farming by individual farming
- (4) to reduce maintenance and institute a bonus scheme
- (5) to develop home and cottage industries through the Jubilee Guilds and Nonia

(6) to draft a Land Settlement Act to establish conditions under which the settlers would be vested with ownership of their holdings (FOC/NA.81/1941).

Farming, on a full-time individual basis, as far as this was possible within the limitations of the physical and human resources already existent in the settlements, became the main objective of revision. The principle of co-operation was aimed primarily at adult education, the marketing of farm produce, the provision of common grazing areas and consumer supplies. Common pastures presented an innovation which differed little from the universal practise in Newfoundland of letting livestock forage at will along the roadways and over the countryside.

The organization of consumer co-operatives was related to the system of maintenance. Government supply stores were converted into co-operatives, and handed over to the settlers, each of whom was given shares. Maintenance rations were paid in cash, rather than in kind as formerly, so that the settlers could conduct the co-operatives as a commercial venture (Snowden, 1965; 13). While co-operatives were being organized by the field workers on behalf of the Department of Rural Reconstruction, branches of the Jubilee Guild or Nonia were being set up in each land settlement to encourage and teach home craft industries such as knitting, weaving, sewing and baking.

Most of the principles suggested for revision were attempted during the three-year plan, and these too formed the main basis to construct small-holding settlements. The overall conceptual design for small-holdings, however, differed from that on the earlier five settlements apart from Lourdes.

Like Lourdes, the small-holding land settlements were organized as settlements with the emphasis placed on self-sufficient farming, with cash income to be derived from seasonal ancillary employment in other industries. The selection of settlers on a denominational basis insured a continuance of the traditional modes of social organizations which had developed throughout Newfoundland over the centuries. In other respects the policy of development in the small-holding schemes tended to conform with revisionist principles and policies in the earlier settlements with emphasis upon individual achievement, the organization of co-operatives, home and cottage industry, and the development of sound practices in mixed farming.

The whole land settlement scheme was carried out in Newfoundland in all its phases without the adoption of an act that either defined the responsibility of the Government or of the settlers in relation to the houses they occupied and the holdings they were apportioned.¹¹ An amendment to the Crown Lands Act in 1934 permitted the laying aside of areas for the purposes of land settlement, but beyond that

no legislation found its way into the statute books of the island until 1944, or two years after the Government had withdrawn from active participation and sponsorship in the settlements. Indeed very little attention was given at any time to the subject of how settlers could legally acquire their homes and holdings until the Government started preparation for a land settlement to repatriate war veterans of the Second World War who were interested in farming. Until the Land Development Act was finally passed in 1944 to govern the establishment of the war veterans settlement at Cormack and which contained retroactive conditions to govern the transfer of titles to settlers involved in the earlier schemes, the land settlers had no legal security to the homes and lands they occupied. (See Appendix B for selected articles in Land Development Act (1944)).

Distribution of Government Spending on Land Settlement

Basically the land settlement scheme amounted to a program of relief for the unemployed. The first five settlements; Markland, Haricot, Lourdes, Midland and Brown's Arm, which had at first 223 families altogether, but which by 1938 contained only 171 families, had absorbed more than three-quarter million dollars in government spending, and had not achieved independence. As a proportion of the total number of the families on relief,

which according to Lodge amounted to about 6000, 223 families represented less than 5 per cent. The small-holding scheme implemented in 1939 involved slightly less than 10 per cent of the 1000 families that Gorvin had suggested. However, rapid improvements in the economy during the early 1940s made small-holding development unnecessary.

In sum total the building of the eight land settlements resulted in a cash expenditure by government of 1.4 million dollars (FOC/NA/106/1943). There were, however, considerable variations in cost among the eight settlements and variations in the distribution of spending within individual settlements. Figure 2.3 shows the total cost of each land settlement and by proportional circles indicates the proposed cost per settler (shaded) in relation to the actual cost per settler given by the total area of the circle. The building of Markland absorbed almost one-half the amount spent on land settlements, and the actual cost per settler exceeded the proposed cost almost six-fold. By contrast government spending in the Small Holding Settlements was more accurately predicted. The proposed spending in both Sandringham and Point au Mal represent the actual amount spent in these two settlements and was only slightly exceeded in Winterland. The proposed cost of developing the Minor Land Settlements; Haricot,

GOVERNMENT SPENDING ON LAND SETTLEMENT 1934-1942

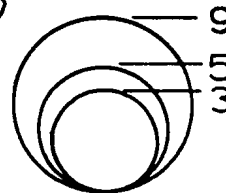


- Proposed cost per settler

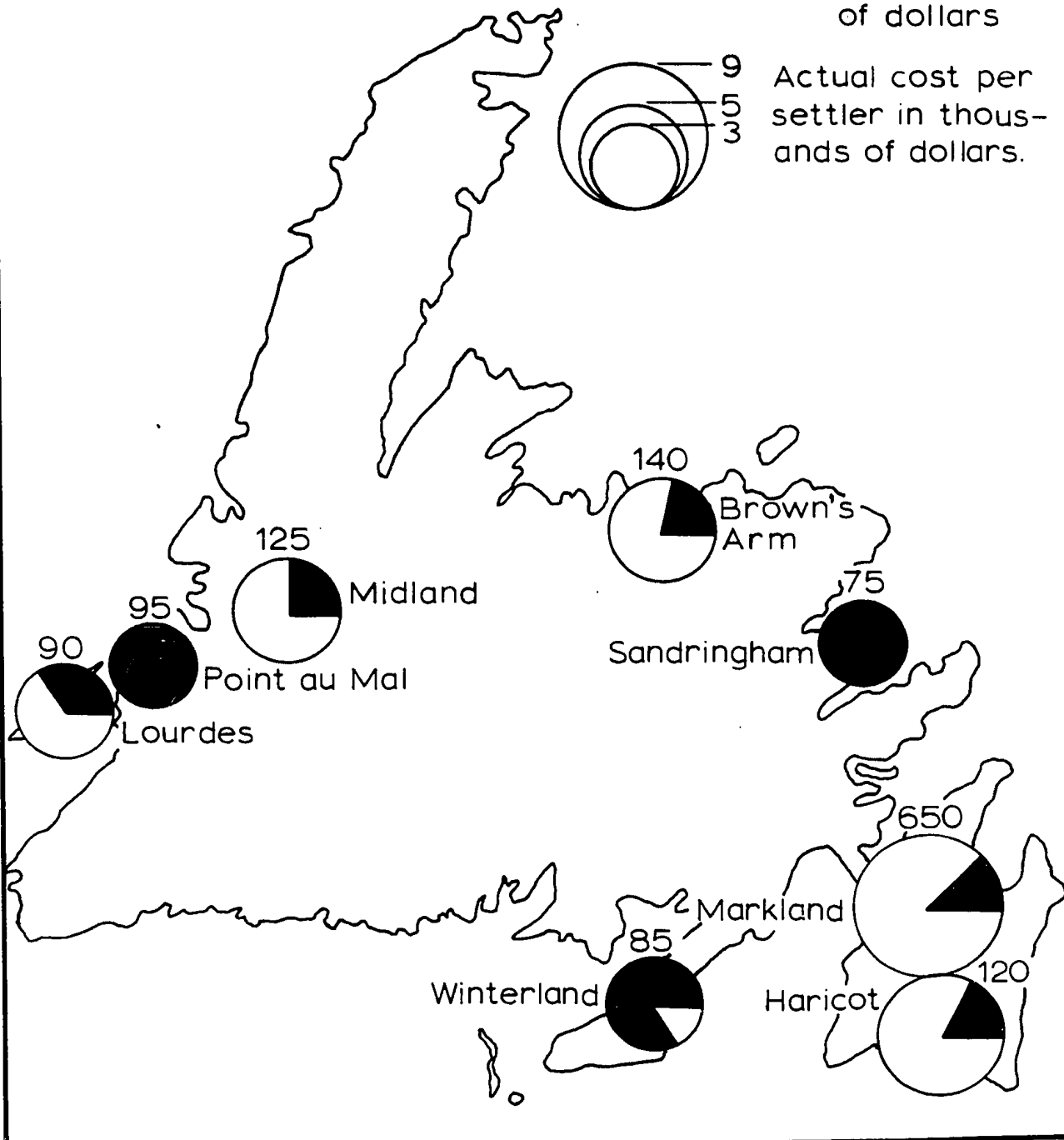


- Additional cost per settler

Number - Total settlement cost in thousands of dollars



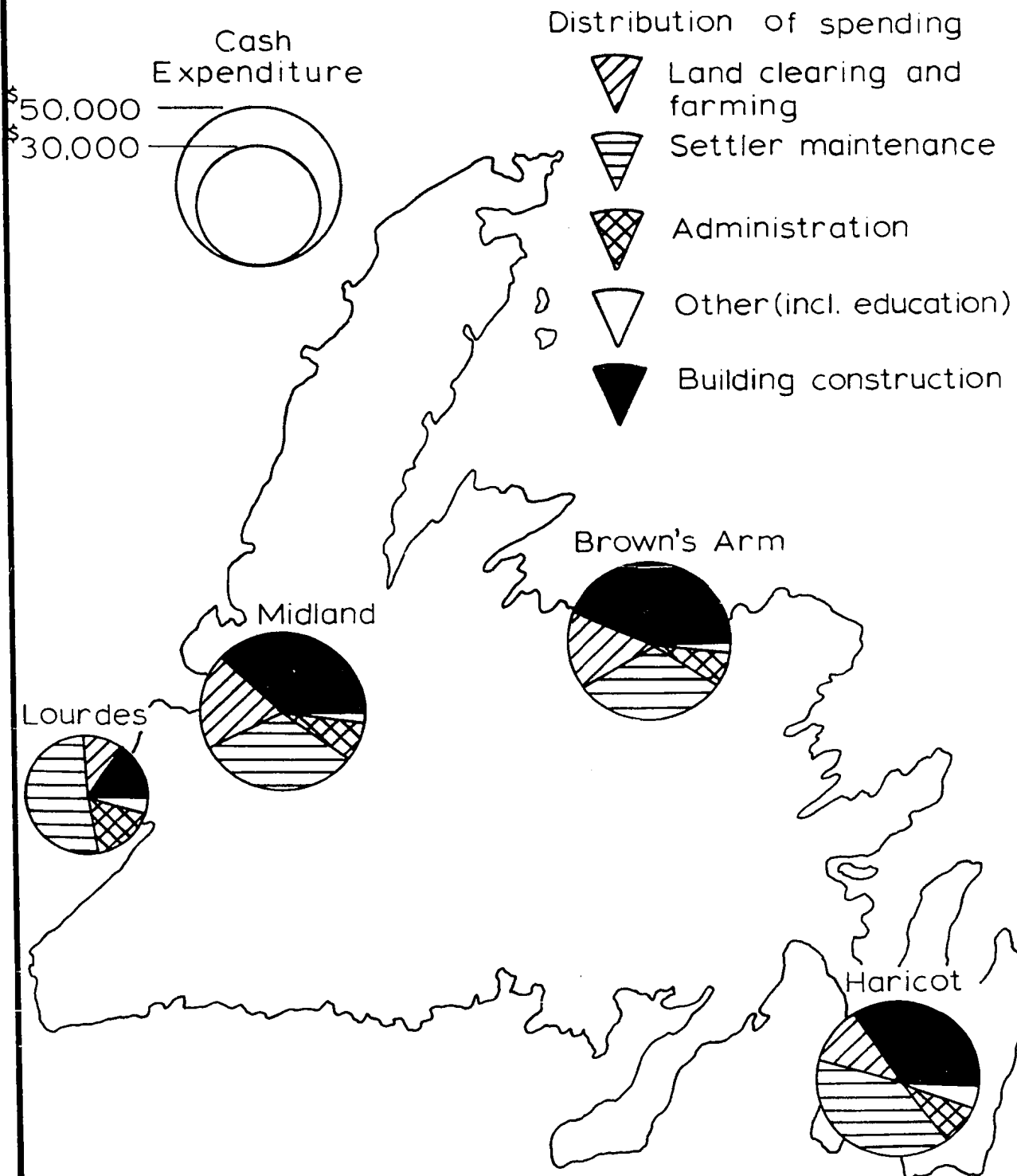
Actual cost per settler in thousands of dollars.



Brown's Arm and Lourdes, varied within one-fifth to one-third of the total actual cost (Figure 2.3). Calculated in thousands of dollars for the settlers residing in each of the land settlements at the time Government withdrew direct financial assistance, the actual costs per settler were as follows: Markland (9.1), Haricot (6.9), Lourdes (3.4), Midland (5.3), Brown's Arm (5.6), Sandringham (3.0), Winterland (3.7), and Point au Mal (2.7). (FOC/NA/106/1943).

Among the first five projects, Lourdes is significantly outstanding compared to the other four, because of its relatively low cost. The main reasons for this are that (1) the fishery in Lourdes employed most settlers upon their arrival and provided a source of income (2) land clearing costs were relatively low because it was done almost solely by hand, whereas in the other settlements powered equipment was employed and (3) settler dwellings in Lourdes were built by the settlers themselves with locally secured materials, whereas most of the buildings in the other settlements were built by contractors and commercially supplied materials. Figure 2.4 gives a general indication of the distribution of spending in the Minor Land Settlements to the end of 1937. The data mapped were taken from audited accounts contained in the archives. Generally, three major items; building

TOTAL AMOUNT AND DISTRIBUTION OF GOVERNMENT SPENDING IN MINOR LAND SETTLEMENTS END 1937



construction, land clearing and farming, and settler maintenance absorbed most of the capital expenditure during the early years, with only slight variations in the relative proportion of each item for Haricot, Brown's Arm and Midland. Although no detailed data are available for later years, it may reasonably be assumed that land clearing and bonuses encouraging farm development represented a much larger proportion of spending then than that for comparable items detailed in Figure 3.4, for during the early years housing, clothing and feeding the settlers - that is, direct welfare assistance, absorbed approximately three-quarters of the capital invested in each settlement project.

CHAPTER III

NATURAL ENVIRONMENTAL CONDITIONS INFLUENCING LAND SETTLEMENT DEVELOPMENT

Introduction

Among the many factors upon which the success or failure of land settlement depend, the natural environmental conditions of the sites selected are very important. Each project is environmentally unique and poses its own specific technical problems in bringing land into production and in satisfying the economic and social needs of the settlers. According to Chisholm, the development of a new farming settlement in an area of country previously unsettled, involves two sets of space relationships - one internal and the other external - which are of extreme importance. The first space relationship deals with five basic elements of the settlers' economy: arable land, grazing land, water, building materials and fuel. The second space relationship deals with the need for regular external contacts, except in the rare case of self sufficiency (Chisholm, 1966; 102-108).

It is generally accepted that the components of the natural environment; location, physical relief, weather

and climate, soils, and vegetation tend to limit, rather than determine, human activities, and that the limitations which the environment imposes are exerted mainly on the economic aspects of a human culture. Limitations can be overcome through technical change and adaptations.

Generally speaking, the more modest and simple the culture the more restrictive the limitations imposed by the natural environment. Perhaps in no other economic activity is the impact of the restrictions and limitations imposed by the natural environment so strongly reflected as in farming. The boundaries for the farmer's work are closely linked to the features of weather and climate, soils, relief, natural vegetation and relative location. In Newfoundland these factors have set severe limits to the development of agriculture and land settlement.

Generally only a small proportion of the mineral soils that cover less than 20 per cent of the island's 42,000 square miles is suitable for cultivation. Besides being scarce, the mineral soils are widely dispersed and consist mostly of coarse podzols derived from Pleistocene glacial deposits. The soils are generally thin, stony and lacking in adequate amounts of nutrients essential for plant growth. Peat soils cover an area of comparable extent to the mineral soils, but these too are extremely acid and lack essential plant nutrients. Although careful

reclamation and ameliorative measures can help to overcome the natural inadequacies of soil fertility and structure, the costs are generally high, often prohibitively so (Shaw et al, 1955; 239-250). Traditionally, reclamation and agricultural land use in Newfoundland have been confined to the accessible mineral soils and the peat soils have been until recently denigned as waste lands.¹

Given suitable soils, the elements of weather and climate impose additional limitations on plant growth and the possibilities for agriculture. Temperature, precipitation, frost, wind, dew, mist, fog and sunshine influence the degree to which any particular plant will grow, or flourish. Although precipitation is generally abundant and the evaporation rate low, the well-drained soils are commonly so porous and percolation so free that moisture is inadequate for plant growth. Temperatures, however, form the dominant climatic control. The growing season, that is the period when mean temperatures are above 42°F, is about one month shorter than in the other Atlantic provinces, and does not generally begin until about the middle of May. The generally cool temperatures in the two main growing months, July and August, limit the possibilities for cereal crops, and makes it more selectively advantageous to produce fodder and root crops. The raising of livestock is seriously hampered by a short

grazing season, the dampness of the spring and fall, and the need to provide large amounts of forage and fodder. Hay curing is generally problematic due to a relatively high humidity, fog and rain and a lack of sunshine (Shaw et al, 1955; 254-260).

In Newfoundland, a large proportion of these areas where suitable soil is available for agriculture is rendered unsuitable by the steepness of slopes. Slope limits the amount of land that can be successfully cultivated for crops as well as the method of cultivation. For example, cultivation by tractor cannot be carried on on slopes as steep as that by horses. Level areas of cultivable land are mostly small, irregular and widely dispersed around the island (1955; 251-252).²

Reflecting as it does a composite of the general environmental factors, the natural vegetation has often been a major basis for determining the location of soils and estimating soil potential. As already seen, this was virtually the sole criterion in selecting the sites of the Newfoundland land settlements. Generally the forested areas of Newfoundland indicate where mineral soils are to be found, but reveal little about topography, stoniness, soil quality or climatic conditions.

In order to be developed for cultivation and grazing, land must be relatively free of trees and surface debris.

On the other hand, agriculture is only one of the industries that competes for use of land that has farming potential. Accessibility, stones, boulders, steep slopes, and poor soils often mean that reclamation costs are prohibitive and that the area is better suited to forestry, wildlife or recreational uses than for agricultural use. Out of a total of 16,600 square miles of forested lands in Newfoundland, the Royal Commission on Agriculture estimated that only about 700 square miles (less than 2 per cent of the Island's area) possessed any possibilities for cultivation (1955; 263).

Since the areas of agricultural land in Newfoundland are mainly small, widely scattered and not very productive, the location with respect to transportation systems and markets, adds a further significant factor to the value of land for agricultural use. The opening up of agricultural land has generally been confined to development along transportation routes developed primarily for purposes other than agriculture and in areas nearest to the main centres of population such as St. John's, Grand Falls and Corner Brook (1955; 260-265).

The restrictions imposed by the physical environment alone make the pursuit of most forms of agricultural development that could be undertaken in Newfoundland, at best, economically marginal. In taking its decisions to sponsor land settlement, the promoters did so within the

light of the limited knowledge available to them, and in so doing reflected a spirit of optimism, and high idealism.

The uncoordinated policy of choosing land for settlement resulted in a fairly wide variation in aspect, both for farming and settlement among the eight projects considered in this discussion. The areas selected for development incorporated variations in size, terrain, soils, climate and weather, and relative location. It should be stressed, however, that although data on the natural environmental conditions of the settlements are much more abundant presently than during the 1930s they are far from complete. Detailed soil surveys are still few. No climatic data have been recorded in any settlement, and these have to be extrapolated from records obtained from the weather stations closest to the settlements, supplemented by observations of settlers from their experience of living in the area.

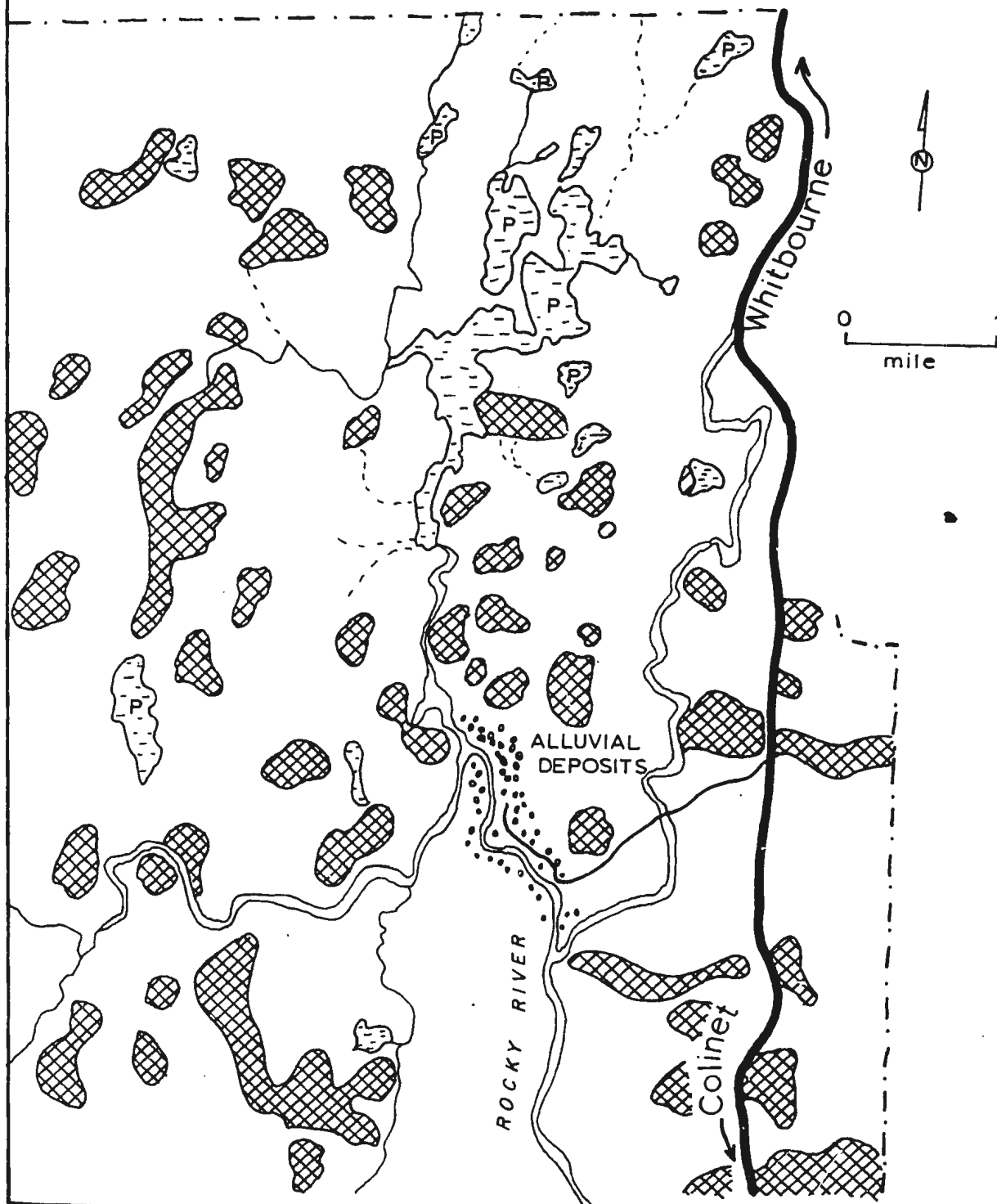
Markland

About two-thirds of the 39 square miles designated for land settlement consists of bog, marsh and water (Fig. 3.1), and the remainder of till hills, ridges, hummocks and knobs interspersed among the poorly drained areas. These surficial features overlies Precambrian wavy-bedded sedimentaries, which form part of a narrow synclinal basin oriented in a north-south direction (McCartney 1967; 47).

Figure 3.1

PATTERN OF SURFACE DRAINAGE IN MARKLAND (Generalized)

Settlement limits	-----	Ponds	
Small stream	———	River	
Intermittent stream	- - - - -		
Poorly drained surfaces small ponds, bogs, and marshes			



Elevations within the area vary between 150 feet and 300 feet above sea level. Generally the area slopes from the north-east towards the south west, and appears in this respect to be accordant with the underlying bedrock.

Locally, relief is very pronounced and characterized by level depressions of poorly drained peat bogs and marshes, and by complex slopes of the better drained till ridges.

The main drainage features of the settlement are provided by two branches of the Rocky River which flows southwestward into St. Mary's Bay. The courses of the two tributaries which flow together within the area are largely controlled by the arrangement of glacial deposits. A small area of recent alluvium deposits (about 15 acres) at the confluence provides the only area of mineral soils besides that found on the crowns and slopes of the hills and ridges. Surface drainage is closely related to topography. The low and relatively level areas are very poorly drained and associated with marshes and peat bogs, whereas the elevated and sloping areas are well-drained and associated with mineral soils.

Apart from a single abortive attempt to reclaim for farming an area of peat bog around 1936, all other efforts both for the purposes of farming and settlement were confined to the areas of mineral soils, that is mainly on the slopes and crowns of elevated tracts of land. In other

words differences in terrain and soil were permitted to determine the order and pattern of settlement. Accessibility formed the second important factor in affecting form and layout. Except for a 2½ mile woodsroad that was later improved to link up the alluvium deposits on the Rocky River with the main settlement, all other development was dispersed along both sides of a six mile frontage on the Whitbourne to Colinet highroad.³

It has been estimated that only about one-third of the settlement contains reasonably productive mineral soils (Herringa, 1969; pers. comm.). The limiting factor of slope (about 60 per cent) reduced the amount that could be safely cultivated in root crops even further. Compared with most soils in Newfoundland, the mineral soils in Markland contain relatively few boulders and stones. Henderson (1960)⁴ attributes this to the fact that the till ridges consist of end-morainic deposits, which generally produce soils less stony and finer than most found on glacial deposits. He further suggests that the moraines were covered by silt where water was trapped between ice retreating toward St. Mary's Bay and the low divide between St. Mary's and Trinity Bay.⁵ According to McCartney, the extreme acidity of both the mineral and peat soils results from the lack of limestone in the bedrock from whence the soils were derived (1967; 47).

Although data such as that presented in Table (3-1) for each of the land settlements are useful in delimiting the general pattern of climatic conditions which affect settlement and economic activities, it is perhaps more important when studying small areas, such as the settlements considered here, to dwell upon local climatic conditions and general situation. Despite its inland location, the climate and weather of Markland cannot be considered to differ much from the Avalon Peninsula as a whole. It is not more than 20 miles inland from each of the four bays of Trinity, Placentia, St. Mary's and Conception, and the relatively low elevations of the surrounding approaches from the sea do not seriously impede the intrusion of marine influences. Especially important are the cold chilling winds from off the Labrador current in spring from the north, and fog from all directions, year round, but generally most frequent in late spring and early fall. Precipitation is fairly evenly distributed throughout the year averaging about 50 inches annually. Within this general pattern there exists a wide variability, and dry summers and snowless winters are not at all uncommon. Temperatures are moderate, averaging about 60°F in July and 18°F in January. A frost-free period which extends from about the end of May to late September generally means a frost-free period of 110 to 120 days, and a growing season

Table 3.1

Temperature, Sunshine and Precipitation Data for Land Settlement areas¹

Area	Range in Height above sea level feet	Frost Free Period Days	Growing Season Degree Days above 42° F	Mean range of First Frost Data		Mean Temperature January July		Moisture May-Sept. Annual Pptr. Inches	Bright Sunshine May-Sept. Mean hours monthly
				Ends	Beginns	(° F)			
Markland	150-300	110-120	2000-2250	May 30	Sept. 25-30	23	62	18	50
Haricot	25-300	110-120	2000-2250	May 30	Sept. 25-30	25	60	20	50
Lourdes	50-100	120-135	2500-3000	May 20-25	Sept. 25-30	23	60	16	40
Midland	120-150	100-110	2000-2250	June 1-5	Sept. 20-25	18	65	14	32
Brown's Arm	10-300	95-105	1750-2000	June 5-10	Sept. 20-25	18	58	18	40
Sandringham	10-150	100-110	2000-2250	June 5-10	Sept. 25-30	20	60	18	40
Winterland	100-150	125-140	2500-3200	May 28	October 16	25	60	22	52
Point au Mal	10- 50	120-135	2500-3000	May 20-25	Sept. 25-30	23	60	16	40

1. There are no weather data recording stations within the boundaries of any land settlements under discussion. Data used here were extrapolated from data compiled by Department of Transport Meteorological Stations at St. John's, Colinet, Grand Bank, Gander, Stephenville and Deer Lake, and are meant only to give a general indication of climatic conditions significant for agricultural development. An additional source of information used included The Canada Land Inventory, Ards Report No. 3, "The Climates of Canada For Agriculture", 1966.

of 2000 to 2250 degree days above 42°F (Table 3.1). This is generally considered adequate for the ripening of root crops which normally require from 50 to 80 days. Infrequent late June and late August frosts sometimes hinder the successful growth of cabbages and potatoes. Markland has a high fog frequency, even in summer, and this tends to delay the maturing of crops. According to several informants, the harvest is delayed on an average from a week to two weeks compared with the same crops near St. John's and around Conception Bay. Except where trees and slopes provide shelter to houses and fields, the settlement is extremely exposed to the high winds which blow with great frequency, predominantly out of the south-west in summer and north-west in winter. Originally most of the settler houses and land clearances were located on the highest elevations. Many of the settlers who persisted in the settlement moved the homes, or when they built anew relocated down slope in less exposed sites.

The natural vegetation in the Markland settlement area is closely related to the features of the terrain, drainage and soils. When the land settlement was started the morainic ridges were well-wooded with stands of mixed coniferous and deciduous trees. Characteristic bog vegetation, scrubby wood, sphagnum moss and various associations of sedges and heath shrubs covered adjoining

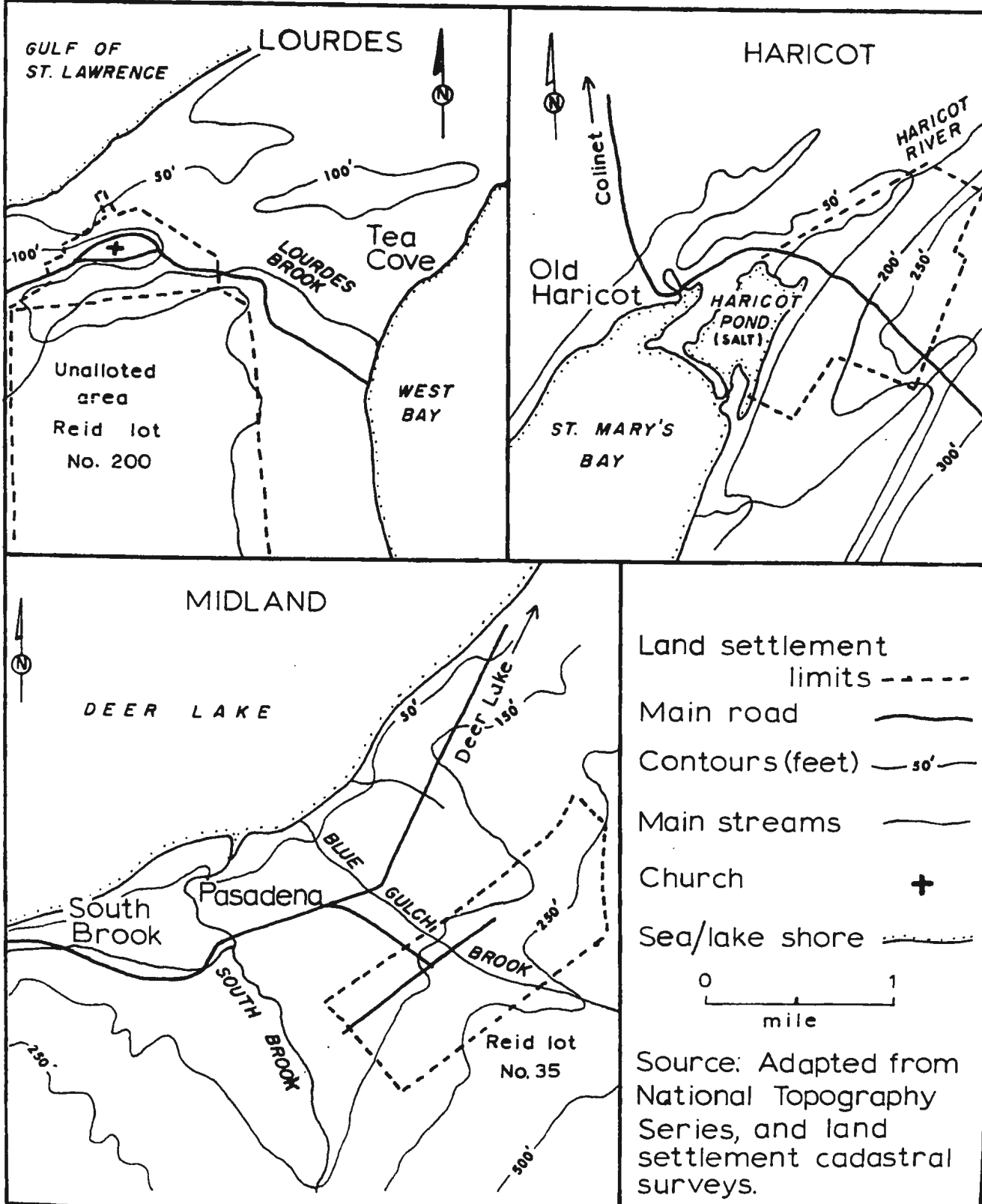
low areas. There is evidence that some of the heavy sawn timber was harvested by loggers from towns in Conception Bay area in pre-land settlement days (FOC/NA/129/1934). For a number of years after settlement started there was a sufficient supply of accessible logs to supply a few small sawmills and a furniture work shop. Many of the better original woodlots were destroyed in the process of land clearing and settlement building, and the remainder subsequently cut over to supply sawn timber, firewood, fence posts and railings. Today second growth tree stands both on private holdings and on the commons are used primarily for the subsistence production of firewood. Though less important than formerly, when it formed the exclusive fuel for heating and cooking, more than 70 per cent of the householders at Markland still use some firewood and 7 per cent burn firewood exclusively. The last sawmill in the community ceased to operate in 1968.

Haricot

The hastily selected site for the Haricot land settlement consists of two main topographic features, together covering an area of 860 acres (Table 1, Appendix C) These are a 20-30-acre alluvial deposit near the mouth of the Haricot River and the generally steep sloping side of a bluff that faces St. Mary's Bay on the west and curves inland toward the north-east forming the south eastern side

Figure 3.2

GENERALIZED RELIEF, SURFACE DRAINAGE, LOCATIONAL FEATURES OF SELECTED LAND SETTLEMENTS.



of the Haricot river valley. On the western side of the river, about one-half mile distant, sits the older settlement of Haricot, built around a small harbour (Fig. 3.2). The slope of the bluff which forms the larger portion of the settlement is apparently controlled by the underlying bedrock, identified by McCartney (1967) as consisting of late Precambrian slates and siltstones. Discontinuous patches of ground moraine of varying thickness plastered on the bedrock formed the main basis for post-glacial soil development (Henderson, 1960). Although the slope of the hillside rises some 300 feet above sea level over a horizontal distance of about 2500 feet, the changing relief is by no means uniform, but consists of series of small terraces, depressions, hummocks, rock outcrops; and mixed slopes that vary from gentle to very steep. As at Markland, land development and settlement did not spread beyond the land that was originally accessible. Unlike Markland, the Haricot settlement was concentrated along a one-half mile stretch of woodsroad that traversed the river flats and the slope between Old Haricot and the settlement of Mount Carmel. The woodsroad later formed the route for the main highway and Haricot's only road. The alluvial flats were originally reclaimed communally, and the twenty-five families moved into the settlement in 1935 were installed in homes on the hillside. In less than one year

ten families had left, and it does not appear that the settlement at any time after has had any families in excess of the fifteen remaining in 1936. At one point about 1958 only two householders occupied the site (Wade, 1969; pers. comm.).⁶ Six householders lived in the land settlement area of Haricot during May 1969 (Table 2, Appendix C).

Except for differences caused by local features of relief and aspect, the climate of Haricot can not be considered to vary greatly from that of Markland lying about 10 miles to the north. A slightly greater marine influence tends to modify both winter and summer temperature extremes, and results in a slightly greater frequency of fogs than at Markland (Table 3.1). Located on a single physical feature, where in land clearing no attention was given to leaving trees to form shelter belts for homes and crops, the settlement area is extremely exposed to the prevailing summer southwesterlies and the winter northwesterlies. In fact, it is not sheltered from winds from any direction. That wind exposure formed an elemental problem from the early days of Haricot settlement is evident from the following comment of Dr. Hanley:

Careful consideration should be given to planning the future lay-out of the settlement to make sure that the settlers have the benefit of the best land and that the necessary shelter and protection from wind will be secured (Hanley, 1937; 52).

In relation to the dominant topographic features of Haricot, drainage presented two somewhat different problems. Firstly the alluvial deposits were poorly-drained and could be reclaimed only through the construction of drainage ditches. Secondly the hillside which was fairly well-drained was difficult to clear because of steep slopes, stoniness and boulders. Once reclaimed the flats were still subject to flooding during the spring runoff and the hillside presented real dangers of soil erosion and mass movement of soils under gravity.

The lack of suitable land limited any significant attempt to place emphasis upon root crops, beyond a bare minimum of family subsistence needs. At an early period the managers attempted to base the livelihood of the settlers on livestock and poultry. The alluvial flats were used exclusively to produce hay at first, but were later converted into an open community pasture. Today this area exists as a poorly-drained sedge-riddled marsh. Most of the land reclaimed on private holdings on the hillside was planted in grass, but in no instance provided sufficient land to carry more than one or two head of livestock, and certainly not enough to form the economic basis of a livelihood for an average sized family.

The resources of the area, apart from the soils, afforded little in the way of alternative occupations to

the poor possibilities the settlement offered for farming. Fishing could have been carried on; however, the settlement lacked a good harbour. In old Haricot the harbour was small and most of the waterside land held privately.

As in Markland, prior to settlement most of the area was heavily wooded in black spruce, balsam fir, and birch. Much of the heavy timber was used up in building the settlement or destroyed in the process. During the period of its founding Haricot had use of a portable saw-mill powered by the land settlement tractor. Most of the original houses were built with lumber sawn at Vinland (See p. 16). Sufficient lumber was produced locally for the construction of settler out-buildings. Accessible wood reserves, though sufficient to provide winter employment for a few men in logging over short periods, could hardly be regarded as a resource base to provide an alternative occupation over any extended period. Throughout the history of the settlement, several families have operated small saw mills on a part-time basis. One sawmill still survives. Second growth woodlots both on private holdings and crown land still provide some of the firewood for heating and cooking. Among the six householders still living there, five (83 per cent) still use some firwood, while three (50 per cent) use it exclusively (Table 3, Appendix C).

Lourdes

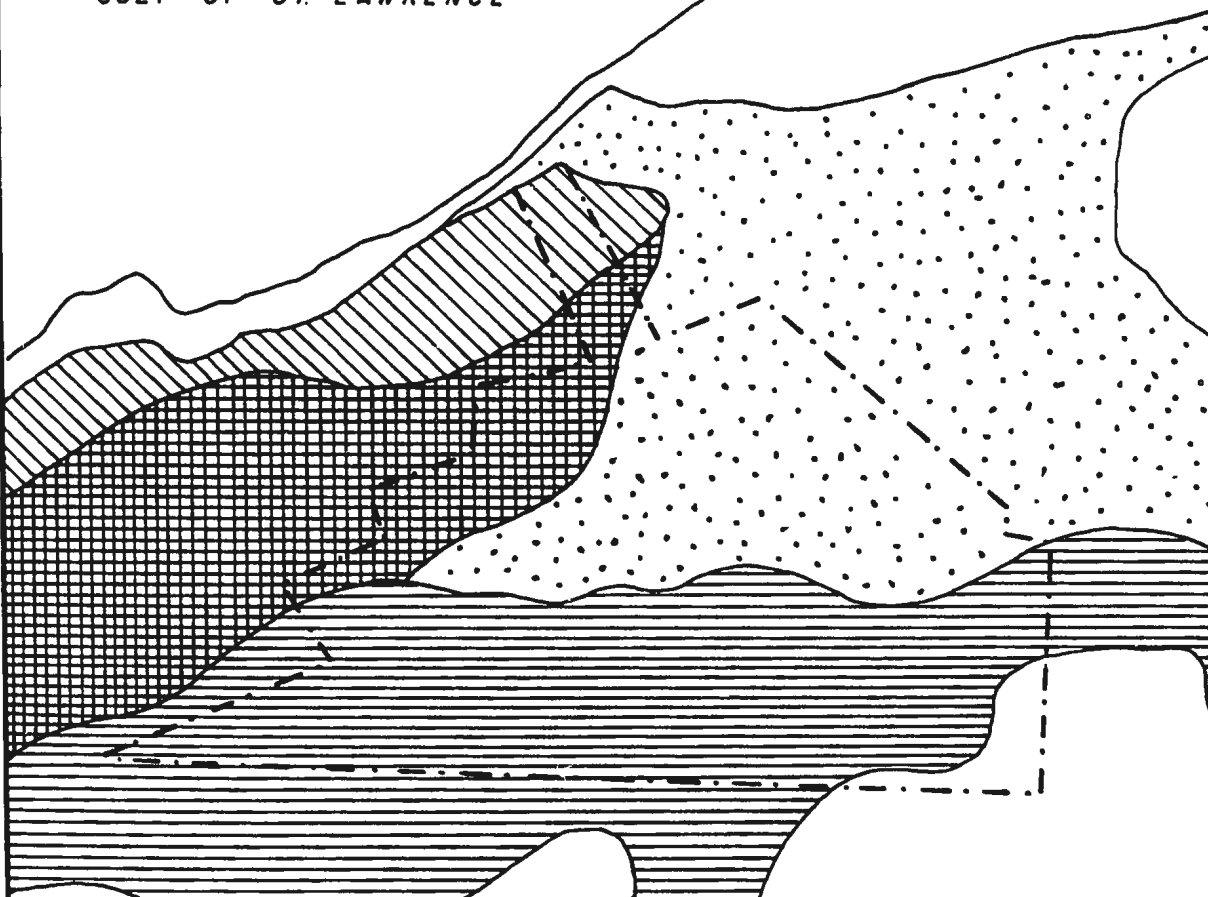
Lourdes⁷ land settlement, located at the base of the Long Point Peninsula in the northwestern part of the Port au Port Peninsula, covered an area of 260 acres, the smallest of the first five land settlements. The area developed as a land settlement was indeed smaller than that allotted under any of the 1939 small-holding schemes (Table 1, Appendix C). The centre of the settlement lies about one-quarter mile from the shore of the Gulf of St. Lawrence on the west and about one and a quarter miles from West Bay in Port au Port Bay on the east (Fig. 3.2). The core of the settlement was laid out around an almond-shaped area of several acres on which the church, school, staff house and parish hall were located, about 100 feet above sea level. Except to the south-west where the land is relatively level with the core, the settlement area generally slopes away toward all other directions from the prominent position of the Church. Lourdes Brook, which has cut a deep open valley through the till and deltaic material over the local Ordovician bedrock, has produced the most marked contrast in local relief, but one that nowhere within the settlement area results in a difference of more than 50 feet in relief, as it flows eastward into West Bay (Wonders, 1951; 170).





SOIL TYPES IN LOURDES AREA

(Adapted after Greenlee)

GULF OF ST. LAWRENCE

0 500 1000ft.

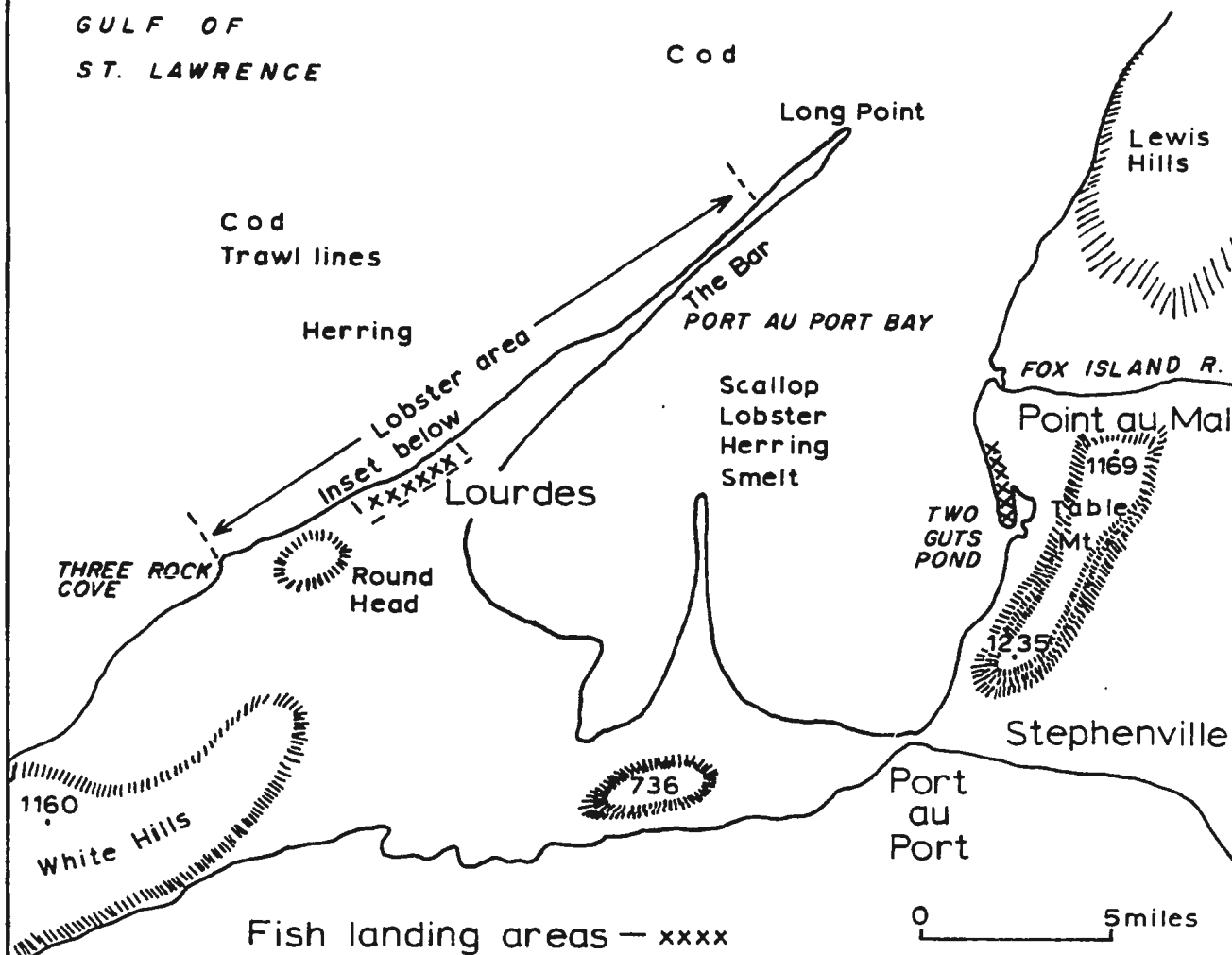


	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>PARENT MATERIAL</u>	<u>DRAINAGE</u>	<u>REACTION</u>
	Gley soils	loam to sandy loam	alluvial sand/gravel	imperfect	highly acid
	Humic podzols	thick humus overlying clay	calcareous till	low internal	slightly acid
	Grey wooded podzols	loam to clay loam	mixed till	—	variable
	Gleyed grey wooded	loam to clay loam	mixed till	low internal	variable

The soils within the settlement, according to Greenlee,⁸ consist of three types, each related to features of topography, parent material and drainage (Fig. 3.3). The bottomland soils of the Lourdes River Valley, occupying about 40 per cent of the area, are mainly poorly drained gleysols developed from alluvial sands and gravels. Humic podzols (40 per cent) and grey wooded podzols (20 per cent) have developed on the higher levels where the main portion of the settlement was located (Fig. 3.3). The humic podzols, as the designation implies, contain a thick upper layer of humus (peaty with low internal drainage) overlying heavy clay. The grey wooded podzols are generally better drained, contain less humus, and are less fine in texture, having developed from mixed till of sandstone, shale, and granite, yet are more acidic than the humic podzols which were derived from calcareous till.

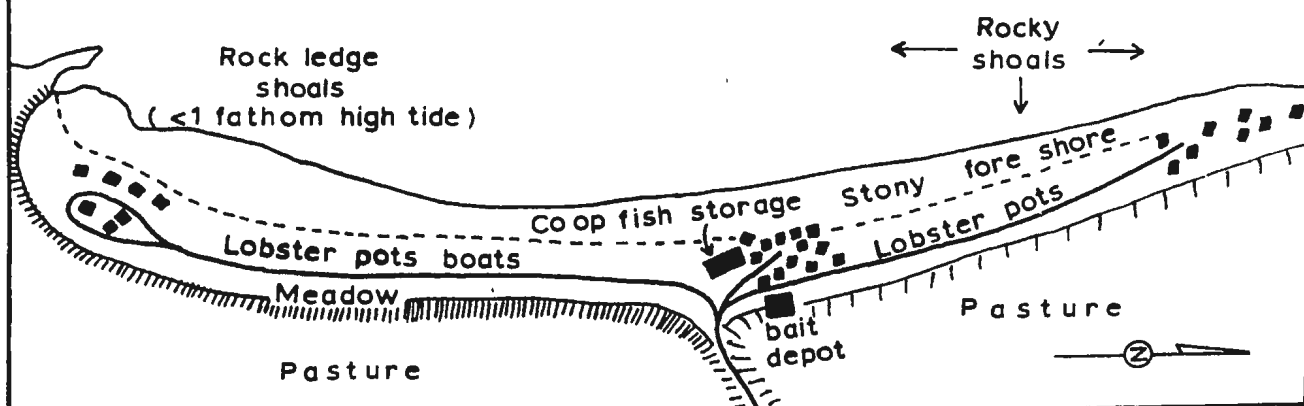
The poor internal drainage of the soils over most of the area is especially troublesome after the spring thaw and after periods of extended rainfall. During these times the land and the gravel roads are a virtual bog. Water-tables remain high and near the surface during most of the year, and apart from a few dwellings on the west, all householders have wells either beneath or near their dwellings. The heavy wet or "puggy" soils are very difficult to plough and cultivate. However, when reclaimed, limed and fertilized they do provide good pasture and hay land.

LOURDES, POINT AU MAL FISHING AREAS



SCHEMATIC SKETCH OF CLAM BANK COVE (LOURDES)

■ - Fish shack or shed



Compared with Markland and Haricot the climatic conditions in the Lourdes area for agriculture appear to be slightly more favorable (Table 3.1). The settlement has a longer growing season, less precipitation in the May to September period, and more hours of bright sunshine. Killing summer frosts are almost completely unknown. Generally speaking, climatic and weather conditions tend to affect the everyday living conditions and other economic activities such as fishing more than agriculture. Beyond cultivating vegetables for subsistence purposes, mostly by hand in lazy-beds, and keeping a few head of cattle and sheep, agricultural development has never assumed any prominent role. The settlement has no protection from the force of the prevailing westerlies and northwesterlies that blow off the Gulf of St. Lawrence. In winter snow is usually accompanied by heavy drifting with fall accumulations frequently over 20 feet high. Even more exposed to the influence of winds is the shoreline at Clam Bank Cove whence fishing activities are conducted (Fig. 3.4).

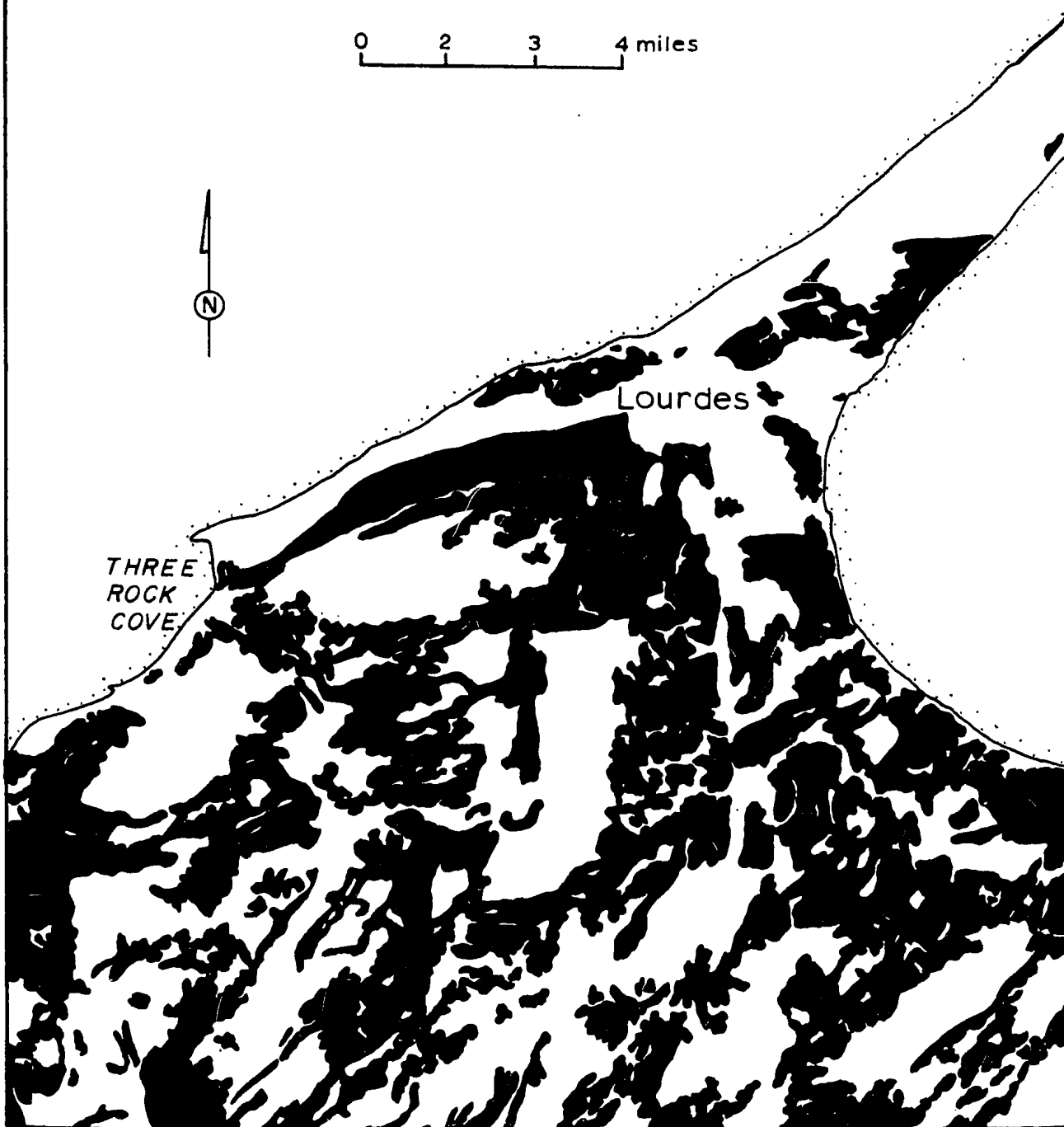
The site of the Lourdes land settlement was heavily forested when the first settlers arrived and was able to provide the sawn lumber needed for the construction of buildings. Additional wood reserves along the western shore of the Port au Port Peninsula near Three Rock Cove and in an area to the south of the new settlement, part of

WOODED AREAS NEAR LOURDES

(Adapted and modified after Williams 1965)

■ Trees productive and unproductive.
■ Mostly secondary growth spruce and fir.

0 2 3 4 miles



which incidentally was surveyed in 50-acre lots under the three year plan to enlarge settler holdings but never leased or granted, provided the resource base for winter employment in logging, saw milling, as well as for fuel requirements. Although most of the sawn log reserves have been cut, occasionally contracts are obtained through the local co-operative society to supply logs and pulp-wood. The forests, shown in Fig. 3.5, still remain important sources for obtaining wood to be sawn into lathes to construct lobster pots and for fuel. Although very few (about 2 per cent) of the householders at Lourdes use wood exclusively as a heat and cooking fuel, 72 per cent use variable quantities of firewood which they cut and haul themselves to supplement commercial fuels such as oil (Table 3, Appendix C).

Most of the Lourdes settlers had formerly been fishermen and most continued to derive the bulk of their income from fishing when they became land settlers (Wonders, 1951; 172).⁹ Like the later small-holding settlements, the land was expected to provide an additional economic dimension for subsistence food production and hopefully a small cash income. In this respect it differed from the Markland, Haricot, Midland and Brown's Arm settlements where the original concept aimed at withdrawal of men from fishing and greater orientation toward working

the land alone. In moving to the Port au Port Peninsula from their former rocky and deep water harbours on the south coast, where soils and wood were either scarce or non-existent, the Lourdes settlers had far better opportunities to gain a livelihood and raise their standard of living. Environmental conditions, as between their old villages and the new, differed considerably, as much in fishing as in other activities, and these produced new adaptations.

In contrast to the deep water and sheltered harbours on the south coast, the outer Port au Port lacks any natural shelter whatever. Lourdes beach, or Clam Bank Cove, consists of an open exposed stony beach lying at the foot of fifty-foot high gravel, clay and sand banks upon which the settlement is built (Fig. 3.4). Off-shore for a distance of about 250 yards water depths average less than a fathom. Rocks and shoals present extreme hazards to launching and landing, especially at low tide and in high winds. During periods of high winds and sometimes for several days following a storm high waves break on the outer shoals and surf the length of the shoreline, making it impossible to navigate. Consequently shallow draught boats which can be quickly launched and pulled ashore form the only type of craft that can be safely manoeuvred and these only when the waters are relatively calm. One of the

first problems the Lourdes settlers faced was that of replacing the trap skiffs which they brought with them with small flat-bottomed dories (1951; 172). Similarly cod traps which require relatively deep and calm water for setting were found to be ineffective, and baited trawl lines were adopted as the primary technique for fishing.

Originally the fishermen rowed, or used sails, to get to the main fishing areas some 6 miles offshore. During the 1950s the out-board motor was adopted and today forms the exclusive method of powering the fishing dories.

Whereas cod fishing was and continues to be largely a relatively off-shore operation on shoals about 6 miles west of the beach, lobster fishing was carried on relatively close to the shoreline extending for distances of up to 10 miles to the north off Long Point and 7 to 8 miles south to Three Rock Cove. The toll of lobster pots smashed by the movement of ice during the late spring and by storm waves is generally very high. Most fishermen set 200-400 traps yearly, but rarely recover that number. One fisherman interviewed during July 1969 set 250 lobster traps, and after a storm salvaged only 26. Though beset with frequent misfortunes, the brief lobster fishing season in Lourdes proves to be fairly productive and the returns generally lucrative.

Midland

The land settlement of Midland was located on a 1250-acre section of a gently undulating terrace at the southern end of Deer Lake within the Humber River Valley system (Fig. 3.2). The surficial geology consists of glacio-fluvial deposits underlain by Carboniferous beds of conglomerate, sandstone, shale, siltstone and limestone. Lake level lies slightly less than 50 feet above sea level, whereas the settlement lying about one mile to the south and built along a northeast-southwest trending straight road, roughly parallel to the lake shore, rests at an elevation of about 150 feet. To the east, south and west about a mile from the settlement massive hills rise to over 1000 feet above sea-level. The slight valley incisions of a few parallel flowing brooks, such as Blue Gulch Brook and South Brook, which drain from the hills to the south-east across the settlement site and into Deer Lake, are the most notable features in the local relief.

The pattern of climate in the Midland area is more typical of the central parts of Newfoundland than of the coastal areas. Summer temperatures are generally warmer; winter temperatures colder than on the nearby western coast (compare Lourdes and Midland in Table 2.1). On the one hand the hills surrounding the settlement tend to eliminate exposure from strong winds and coastal fogs. On

the other hand the settlement tends to be subject to morning mists and valley fogs and experiences night frost particularly in late June and mid-September.

At the time the Midland settlement began in 1936 the area together with the surrounding hillsides was virtually a virgin forest of heavy stands of coniferous and deciduous species, representing one of the best timber growths to be found on the island. The site was chosen on land originally owned by the Reid Newfoundland Company.¹⁰ About 1926 cutting rights were acquired by the International Pulp and Paper Company at Corner Brook, after 1938 Bowaters. During the spring of 1936 the Land Settlement Board sent a tractor into the area to clear an access route from the railway into the woodland. A straight trail was cut and cleared for about a mile in length, about one mile south of and parallel to the railway. Settlers arrived in June. House building and land clearing proceeded.

The existence of an excellent usable and marketable wood resource, proximity to the Corner Brook pulp and paper industry and the availability of winter work in cutting and hauling pulp-wood represented a very important economic aspect to the first generation of Midland settlers, and an important source of cash income to supplement their farming effort. The original houses were mostly built by contractors and lumber supplied from Corner Brook. However, the land

settlement saw mill itself provided most of the building materials needed for additional buildings. After government withdrawal the sawmill was taken over by a settler and operated until about 1947. This sawmill closed shortly after supplying most of the lumber used on the construction of houses in the war veterans' land settlement at Cormack.

It would appear that alternative employment to farming at Midland, as at Lourdes, proved to be more significant than farming itself in rehabilitating the original settlers. Despite providing relatively ideal conditions for forest growth, the suitability of the soils and climatic conditions for growing vegetables was quite a different matter. The generally flat to gently undulating topography has resulted in poor internal drainage of soils and assisted in the accumulation of a thick upper layer of humus. Water tables remain high throughout the year. In most areas it was found impractical to use heavy equipment to clear land except during July. Stoniness represented an additional impediment to any intensive development of arable land. Even though removed year after year, each spring most fields yielded a new stone crop wedged by frost from the subsoil. Late spring frosts tended to discourage the planting of cabbages and sometimes mid-summer frosts damaged the potatoes.

In spite of the physical deterrents, most of the original settlers farmed until the post-Confederation period when new job alternatives and marketing problems combined to discourage the farmer-logger mode of life. Today Midland as part of the town of Pasadena has almost been completely urbanized, and has become very largely a dormitory community for families who find daily commuting jobs in Corner Brook. The subsistence production of food and fuel, and the former patterns of seasonal work in farming and logging have been largely obliterated in the process.

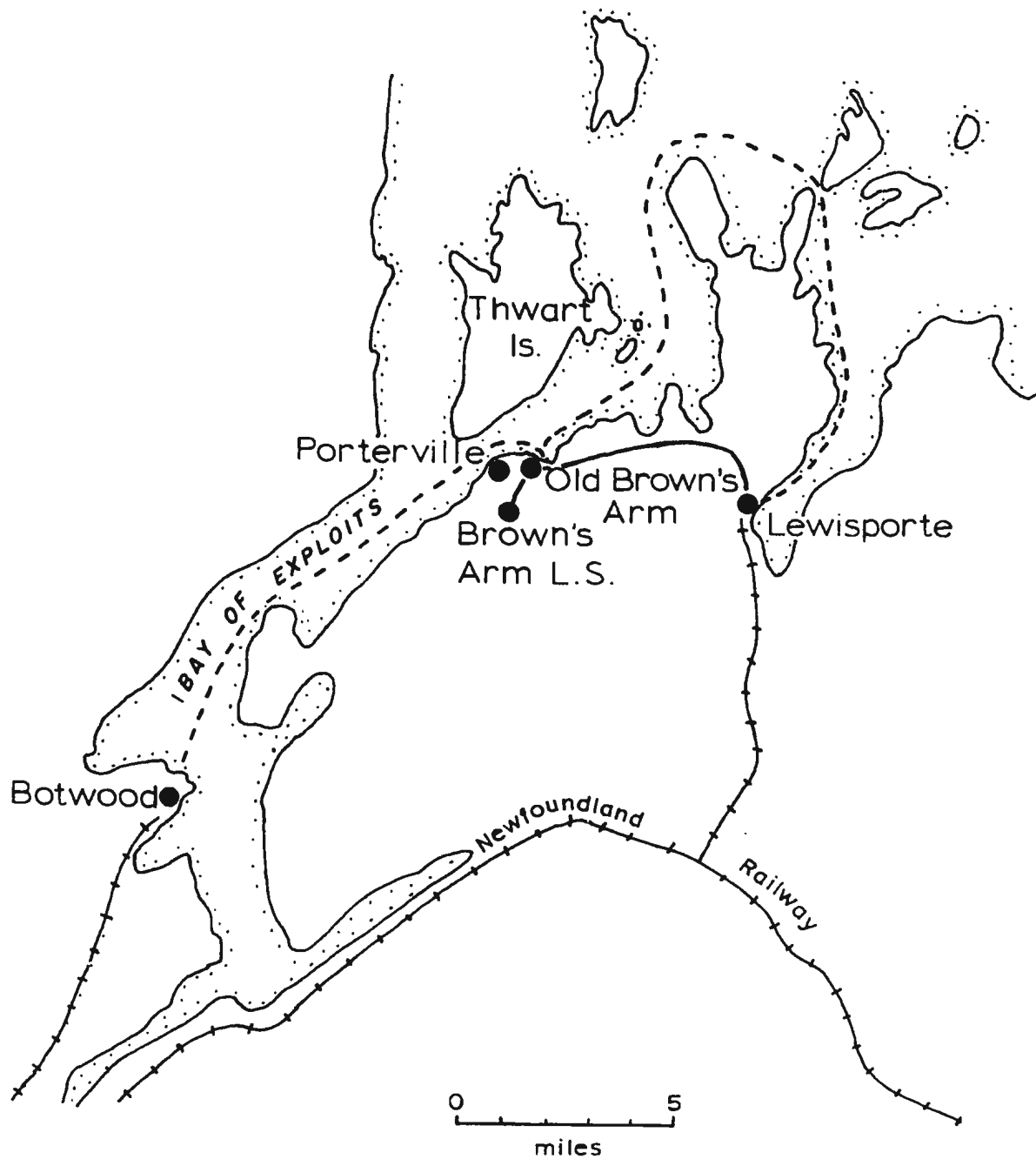
Brown's Arm

The land settlement of Brown's Arm represented a landward and southern extension to the earlier coastal village of Brown's Arm, a small fishing-farming-logging community of about a half dozen households (Fig. 3.6). The area of the land settlement, about 800 acres, was selected from the former logging and firewood hinterland of the old Brown's Arm settlement and the adjacent settlement of Porterville. Just prior to land settlement a steam powered sawmill located on the shoreline had closed down having used up most of the sawn timber within the area (Chafe, 1969; pers. comm.).

The land settlement was developed on both sides of a tractor trail pushed through woodland of mixed coniferous

BROWN'S ARM LOCATION AND EXTERNAL CONTACTS

Movement of people and goods
by boat 1936-1939 - - - - -
Road constructed 1939 —————








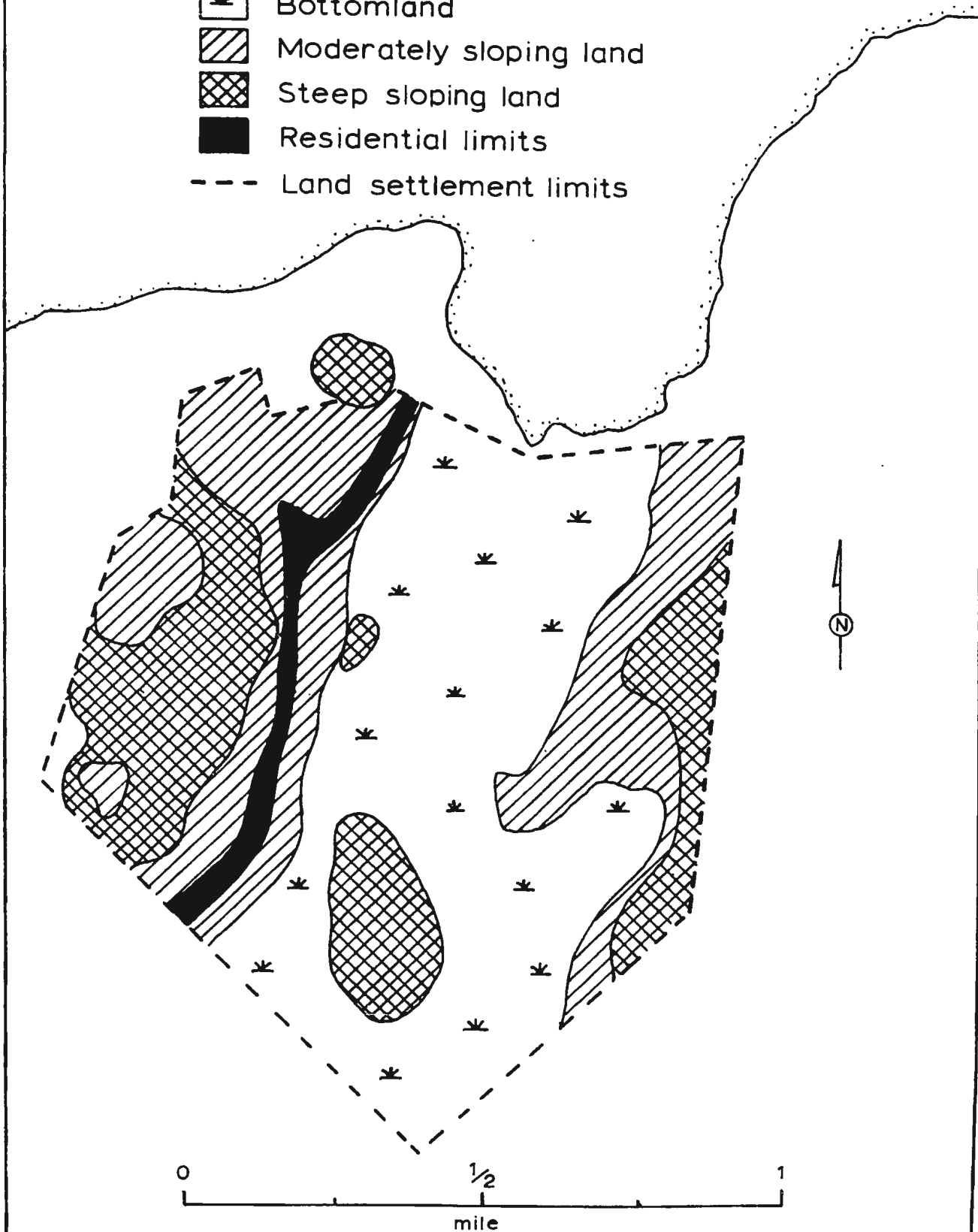
and deciduous species along the base of two steeply sloping hills for a distance of slightly more than a mile in length (Fig. 3.7). To the west at the top of the higher hill the land rises to over 300 feet above sea level, to the east the land falls away very gently to the bottom of a valley drained by a sluggishly flowing stream draining from south to north parallel to the main road. The road itself and the main group of buildings roughly follow the 50-foot contour interval. About half the total area consists of lower lying bottomland, marsh and meadow lying along the stream banks, covered with alders, scrub woodland, mosses and sedges.

The frost free period (95-105 days) and the growing season of degree days above 42°F (1750-2000), make Brown's Arm one of the least attractive of the land settlements for farming in terms of climatic conditions (Table 2.1). The localized effect of easterly and northeasterly winds off the spring's Arctic floe ice and cold Labrador current tends to retard the arrival of the increased temperatures required for early plant growth. Damaging frosts have been known to occur during every month of the June - September period, but are most common in late June and mid-August.

The main development of agricultural land was confined to the mineral soils on the gentler slopes of the hills and valley sides where tractors and bulldozers could

RELATIONSHIP BETWEEN TOPOGRAPHY AND SETTLEMENT BROWN'S ARM

-  Bottomland
-  Moderately sloping land
-  Steep sloping land
-  Residential limits
-  Land settlement limits



safely manoeuvre. The water-logged bottomlands have remained largely unreclaimed although this land comprised the major portion of land holdings allotted to settlers on the eastern side of the settlement. The main group of mineral soils consists of very coarse textured podzols developed on ground moraine. These soils have a very low water retention capacity and in periods of low precipitation are subjected to extreme drought (Heringa 1969, pers. comm.). Naturally very acid in reaction and heavily leached, the soils require large amounts of lime and fertilizer applied yearly to maintain any degree of fertility.

Hanley suggested that the Brown's Arm land settlement had an unusually good opportunity to develop a fairly large area of riverside land as a pasture which could be used communally or divided among the settlers (Hanley 1937, 52). There is little evidence to indicate on the landscape, in the government records or in the recollection of the early settlers that any attempt was made to reclaim land beyond the limits of where heavy equipment could be used to pull stumps and break the soil. The technology employed in land reclamation added its own modifying effects to those of the natural environment in the development of agriculture. The net influence of the limiting factors in combination was that most settlers were provided with an average of 2 to 3 acres of arable land, 5 to 6 acres of improved pasture and grassland, within the

confines of holdings that averaged 26 acres per family (Table 1, Appendix C).

In terms of alternative employment where cash income could be earned, the land settlement area in Brown's Arm offered little beyond what the soils could produce. The settlement lacked a fish landing location unless it encroached upon the privately held waterside properties of the earlier settlers. The supply of wood left after the pre-settlement logging operations and land clearing during land settlement though adequate to supply the domestic fuel and building needs of settlers, hardly formed the basis for any commercial exploitation. During the first winter after the settlement began, most of the settlers secured employment with the Grand Falls pulp and paper company in cutting pulpwood at camps located in Central Newfoundland (Chafe, 1969; pers. comm.). Small-scale mixed farming, mostly at a subsistence level, combined with pulp-wood logging in winter, established the dominant pattern of economic activity for Brown's Arm settlers that has continued but with diminishing importance to the present.

Locally the settlement is well-sheltered from the full force of winds by islands and land promontories to the north, and by rugged hills to the east, south and west. Wells located at the foot of the steep hill slopes form the main, though not always dependable, supply of domestic water

needs. In the drier summer periods a low water table sometimes forces householders to fetch water from brooks and streams, or the more reliable reserves of a neighbour's well. Firewood secured both on the private holdings and on the commons still forms an important item in the economy of Brown's Arm households. For 52 per cent of the householders, wood is the exclusive fuel for heating and cooking, while for an additional 30 per cent, it supplements commercial fuels (Table 3, Appendix C).

Sandringham

The small-holding land settlement of Sandringham¹¹ on the Eastport Peninsula in central Bonavista Bay rests on a small and relatively flat site, at the side of a shallow salt water reach but not on the open coast. The total designated area for land settlement covered 550 acres; however, only about half of this land (283 acres) was allotted in holdings to the settlers (Table 1, Appendix C). Most of the land holdings and settlement buildings are confined within an area that varies between 50 and 100 feet above sea level. The northern and western perimeter of the settlement is defined by the shoreline of Alexander Bay Arm. Rugged hills, varying in elevation from about 250 to 500 feet above sea level and exposing bedrock of Precambrian slate, siltstone, greywacke, sandstone and conglomerate, cut by basic dykes and sills, lie immediately to the south

east, south and south west (Jenness, 1961; 21). Surficial deposits of glacio-fluvial fine sands, overlain by coarse sands and small boulders, formed the main parent material for soil development. According to Jenness, sandy deposits underlie much of the farm land at Sandringham and practically all of the land that extends the four miles between Sandringham and Eastport on the east (1961; 21).

Several small streams originating in the hilly area to the south cross the settlement area and empty into the sea on the north. The flatter and depressed areas are very poorly drained, and muck deposits covered with alders and small peat bogs are interspersed throughout the settlement though mainly concentrated along the low lying shoreline frontage to the north. To the northeast and northwest the soil is shallow and bouldery though originally covered with a good cover of mixed coniferous and deciduous forests. Almost all of the better drained mineral soils are concentrated on a single gently undulating terrace in the central portion of the designated land settlement area, covering an area of about 200 acres.

This limited area of land offered the only possibility for agricultural reclamation using heavy equipment. Most of the soils were found to contain some stones and small boulders in their upper layers, but being removable these did not form any great obstacle to cultivation. Compared to most mineral soils on the island,

those at Sandringham are relatively stone free.

The coarse sandy nature of the terrain in and around Sandringham tends to make soils very porous, droughty and acidic. Lime and fertilizers tend to get washed downward out of the effective range of plant roots through excessive leaching and must constantly be replaced to maintain soil fertility (Heringa, 1969; pers. comm.). During dry summer days the soils become dry quickly and pose problems of surface dessication (Williams, 1963; 99). Generally, natural conditions are very poor for grasses which require a constant supply of moisture to thrive, and only slightly better for the production of vegetables.¹² Agricultural productivity here has to be mainly a function of intensive arable rotation, careful cultivation, adequate inputs of essential plant nutrients and intensive labour.

Climatic conditions at Sandringham could be considered only slightly better than those at Brown's Arm in terms of farming activities such as growing vegetables and keeping livestock (Table 2.1). The spring period is generally very wet, with cold easterly winds keeping temperatures close to the freezing point. Cabbage plants are extremely susceptible to damage from the occasional mid-June and late June frosts. Variability in the growing season from year to year creates other problems, some which the farmer can remedy, others which leave him rather helpless.

Rain or moist conditions at frequent intervals (once every two or three days), is essential to keep the soils from becoming too dry. On the other hand excessive rain, fog, and cloudiness prevent crops from ripening adequately resulting in low yields. Generally potatoes and turnips tend to yield better under the more extreme dry and wet conditions than cabbages, which require a constant supply of moisture and yet plenty of sunshine. In the dry summers it is possible to salvage the cabbage crop through irrigation. Hay tends to yield poorly on the sandy soils and has only a short growth period in the drier years. Though most of the early settlers kept a few livestock, usually a few sheep, a horse and a cow, the short grazing season, the lack of pasture-land and the problem of providing winter feed have tended to discourage settlers from keeping any large numbers (Williams, 1963; 99).

The original plan for Sandringham called for the resettlement of 50 families, each with a 5-acre holding. The number was later reduced to 25 families with holdings averaging 10 acres (FOC/NA/81/1941). It was anticipated that alternative seasonal employment in fishing, logging and lumbering would be required to supplement farming income if the settlement were to become economically viable. Locally fishing offered poor prospects, since the settlement had no direct access to the sea and the richer

inshore cod grounds, salmon runs, and lobster areas. Lobster, smelt and sea trout, the main fish species found in the shallow and rocky waters of Alexander Bay Arm, are not plentiful enough to exploit commercially.

The forest resources on the Eastport Peninsula generally, and around Sandringham particularly tend to be patchy and interspersed among ponds, marshes, rock outcrops and scrubby barrens. Over the decades before settlement much of the woodland was cut over for sawn timber by fishermen from the outer settlement on the coast. Some fine white pine covered the glacio-fluvial sand deposits but these were long gone by the 1930s. In and around Sandringham and along the shores of Alexander Bay Arm, generally frozen during the winter, wood resources were adequate to supply firewood, logs and railings for the farmstead and sawn timber for a small lumbering and boat-building industry. The nearest important logging area was located inland from the south westerly reaches of Newman Sound, that is, within the present day boundaries of Terra Nova National Park. Many of the Sandringham settlers had previously worked in this area from their former homes, combining this work winter time with summer fishing on the Labrador Coast. The establishment of the park about 1955 alienated the utilization of this wood resource.¹³

The generally poor soils found at Sandringham compared with some of the other land settlements would tend to suggest that it would be one of the least likely to succeed, particularly as a farming settlement and in view of the fact that initial emphasis was on part time, supplementary farming, rather than on farming as the major economic activity. Yet with respect both to the original generation of settlers and to their sons, Sandringham has to rank high among the land settlements in achieving most of the initial goals established in the plan for settlement and in becoming more than a supplementary farming settlement through the development of a small, though significantly important, commercial family-farm economy.

Like Lourdes and Haricot, Sandringham was constructed within a relatively compact area with houses spaced fairly close, mostly within a few hundred feet of each other. The surrounding hills afford some shelter from winds from the south and west. A huge promontory to the northeast across Alexander Bay Arm provides additional protection from easterly winds. More locally, however, trees provide the best protection from high winter winds and drifting snow. Unlike Lourdes, Haricot and Markland, some attention was apparently given during the early phases of construction to leaving tree belts along road frontages and field boundaries to protect the soil, crops and dwellings from exposure. With reference to water for both

domestic and irrigation needs, convenience and adequacy of supply are related to topographic and drainage features. Households on the higher sandy locations find that their wells frequently go dry for extended periods during the summer months, while those located on the more depressed and level sites do not experience the same water-table drop and generally have adequate water supplies from their wells near the dwelling to sustain them throughout the year.

Winterland

The original pattern and function of settlement on the Burin Peninsula was essentially the same as that for the greater part of Newfoundland. Settlement was coastal and based primarily on fishing. The first non-coastal settlement undertaken was that sponsored by the Commission of Government at Winterland¹⁴ some 7 miles west of the towns of Marystown and Burin, and about 5 miles east of the settlement of Garnish. Winterland is still the only inland settlement to be found on the Burin Peninsula today.

The first recorded evidence that the land held reasonable possibilities for agriculture came apparently in a suggestion in the Magistrates' Survey of the Placentia Bay in the autumn of 1936 (see p. 19):

There is some land at Marystown and some much better land with heavy timber at Creston. There is said to be some fine land some miles inside Marystown, rather too far away from the sea for the fisherman-farmer (FOC/NA/147/1937)

Gorvin in his 1938 "Interim Report on Rural Reconstruction" reiterated the advantages of this inland location for agriculture, but disagreed on the impracticability of pursuing fishing. He contended that the area between Marystown and Garnish was suitable for fishermen-farmer small holdings (Gorvin 1938b; 7-8).

Government surveyors in 1939 established a land settlement area of some 1400 acres (Table 1, Appendix C). The terrain encompassed a low wooded rolling ridge of about 300 acres, a mile long and trending in an east-west direction. The width of the ridge varies from about 50 feet to 1400 feet north to south. The larger part of the designated land settlement area consisted of lower lying bogs, barren, ponds and scrub woodland.

Though very limited in area the mineral soils found on the settlement ridge, or terrace, and in a few scattered pockets around the settlement, are the most inherently fertile in any of the land settlements for root crops. According to Heringa, the Winterland mineral soils are mainly of brown wooded loams derived from shale, sandstone and conglomerate. Generally, these are only slightly acid in reaction due to the natural presence of lime. A fine texture gives the soils capacity to retain moisture and to restrict leaching (Heringa, 1969, pers. comm.).

Compared with the other seven land settlements, the Winterland settlement has the longest growing season, the mildest winter,,the highest amount of both summer (May-Sept.) and annual precipitation, yet the least number of hours of bright sunshine from May to September (Table 2.1). These extreme differences may be largely accounted for by the following reasons: (1) Spring is not delayed by the influence of Arctic Ice and the chilled air from the Labrador Current to the same extent as coastal areas to the north and east; (2) autumn frosts are delayed because of the greater predominance of marine over land influences as compared with say Sandringham, Brown's Arm or Midland; (3) winds from all directions tend to bring moist conditions and fog from coastal areas; (4) the high prevalence of spring, summer and autumn fog and cloudiness reduces the amount of effective hours of sunshine during the growing season. Added to these influences the settlement is the southernmost of the land settlements.

The local aspect within and around Winterland does little to alter the general pattern of climate and weather of the nearby coastal regions. Although some rugged hills surround the approaches to the sea, most are located at 5 miles or more in distance. The prevailing westerly winds have little difficulty penetrating into the settlement some 5 miles inland over this terrain that varies in elevation


between 100 and 400 feet. The wind breaks, formed by trees left during the early stages of construction, afford the best shelter in the settled area to what would otherwise be an extremely exposed site.

The drainage pattern of Winterland can be described as radial. Small brooks fed by surface drainage and springs flow outwards from the settlement area into the surrounding bog lands and marshes. The fairly evenly distributed and abundant precipitation, a low evaporation rate and the internal drainage conditions of surficial deposits keep water tables high in the settlement. Most householders have in the past maintained, and continue in the present to maintain, individual wells to supply domestic water requirements (Table 4, Appendix C).

The material resource of the Winterland local area very much limited development to farming. The most heavily wooded area was coincidental with the only area that offered potential for agriculture both from the point of view of the perceptions of the developers and the technology available for development during the early 1940s. Small copses of generally poor woodland grew along the stream beds and on the pockets of mineral soils within fairly easy access, but these were sufficient only to supply fuel and sawn logs for general settlement and farm uses.

It does not seem that the details of how settlers at Winterland could engage in both farming and fishing were ever clearly worked out. During the 1940s the settlement was extremely remote and connected to Marystown, Burin and Garnish by the bare rudiments of a narrow gravel road which traversed the breadth of the Peninsula. One original settler informant claimed that when the settlement began there were only two trucks on the entire Burin Peninsula. It seems likely that the government originally envisaged settlers going into the deep sea fishery on bankers out of Grand Bank, Fortune or Burin in which case they would be away from home for a number of weeks, and would not as in the situation of inshore fishermen require a harbour, landing facilities, fishing berths, boats and fishing gear on an individual basis. Initially the main objective at Winterland was to establish a farming economy based upon the development of livestock and accordingly some effort was made to establish grassland (FOC/NA/106/1943).

If Winterland were to be judged on the question as to whether or not it become a fishing-farming settlement, or a farming settlement based on livestock, it would have to be judged a failure. Yet as a farming settlement based upon the production of root crops supplemented by livestock it has been fairly successful. This raises the question as to whether short-term successes or failures followed



respectively by long-term failures or successes cast doubts on judgments which pronounce failure or success. For example, recent and current development of bog lands and barrens, formerly regarded as waste land, may reverse the emphasis in farming from root crops to livestock. Winterland may very well become in the near future a major livestock producing region.

During 1940, 23 former fishing families were placed in Winterland. Seven families who returned to the fishery left the settlement and returned to their former homes at Garnish and Burin. The remainder persisted and gained their livelihood from mixed crop and livestock farming. Today Winterland is still the main agricultural settlement on the Burin Peninsula. The data on householder production of vegetables and livestock, shown in Table 5, Appendix C, is perhaps somewhat misleading in that it shows that Winterland ranks relatively low when compared with the other land settlements. The main reason for the relatively low percentages is that the present householders at Winterland include ten families resettled in the community since 1961 none of which either till the soil or keep livestock. With reference to the marketing of farm produce, even with the recent arrivals included, Winterland ranks close to Sandringham both in absolute number and percentage of householders. In the production of vegetables for 1968,

Winterland ranked second only to Sandringham in potatoes and out produced all land settlements in turnips and cabbage (Table 6, Appendix C).

Point au Mal

The third of the small-holding land settlements and the second land settlement project in the Port au Port area was that at Point au Mal, about seven miles north of Port au Port. The settlement sits on a narrow marine terrace less than 50 feet above sea level and is built along a one and one half miles road that skirts the inner fringe of a shallow salt water lagoon. To the north the terrace widens and merges with the delta of Fox Island River. To the east of the settlement and less than a mile away the northeast-southwest trending Table Mountain rises sharply to a height of over 1200 feet (Fig. 3.4).

About one half of the designated settlement area consisted of poorly drained gleysols developed on heavily set and fine-textured marine clays and silts. A pebbled and gravelly barrier beach and spit define the coastal margin with Port au Port Bay and enclose landward a shallow salt water lagoon and a tidal marsh of about one mile in length north to south and in width that varies up to one-half mile. Poorly drained lands extend westward along the flat areas and the margins of streams flowing from the foot of Table Mountain and a forested area to the northeast.

The better-drained soils lie in the northern section of the settlement where the topography is more gently sloping. This is the area adjacent to the earlier indigenous settlement of Point au Mal which, according to the Newfoundland Census 1935, comprised 4 household units with a total population of 23.

The shallowness of the topsoil and the spongy nature of the waterlogged subsoils created extreme difficulty for land clearing with tractors and bull-dozers. Even when the land is cleared the soil is shallow and must be cultivated very carefully. Deep ploughing can result in turning up the silt and clay loams which harden into cement-like surfaces. Without ameliorative measures to improve internal soil drainage, texture and fertility, the land had few possibilities for the development of arable, but was rather better suited for hayland and pasture, and hence the raising of livestock. The report of progress in development for 1941 emphasized the main agricultural role planned for the settlement

Most of the new clearings made during the year were devoted to grass and other fodder crops as it is intended that the settlement will largely rely upon raising and selling livestock for its income (FOC/NA/106/1943)

The main differences in climatic and weather conditions between Lourdes on the outer coast of the Port au Port Peninsula and Point au Mal on the inner eastern coast of Port au Port Bay relate to specific differences in local aspect, situation, and features of the terrain. On

the one hand the sand promontory of Long Point to the west protects the Point au Mal shoreline from the lashing by deep ocean swells that pound the shoreline of the outer Port au Port Peninsula during and after storms. On the other hand Long Point is too low and too far distant to modify the full impact of the prevailing summer southwesterly and winter northwesterly winds. Locally shelter from northerly and westerly directions is found only by the natural vegetation of tree and alder beds left in some instances intentionally to form wind breaks and in other instances because the stands occupied relatively poor sites for reclamation. Although Table Mountain shelters Point au Mal from east and southeast winds, it has an important additional effect on local weather. During winter periods it creates a snow barrier causing drifts to pile up to great heights, occasionally 20 feet or higher, from storms that approach from the west. South-east winds that sometimes follow in the wake of snow storms drift additional snow from the top of the mountain which settles in the lower lying sheltered area occupied by the settlement. Living and working conditions are generally very unpleasant in the winter. The spring usually brings a long-drawn period of surface run-off during which time the lower lying and flatter areas are totally submerged.

Except for the tidal marshes, the area selected for the land settlement formed the southern extension of a heavily wooded area to the north around the estuary and delta of Fox Island River. From there the forests continued inland following the valleys of other rivers for distances of up to 25 miles. A substantial part of this area, including that chosen for land settlement, formed a pulp-cutting concession held by Bowaters, formerly Reid Lot 201.¹⁵ The government acquired the land for settlement from Bowaters in exchange for another cutting concession on another part of the island (Gillingham, 1970, pers. comm.).¹⁶ The paper company, however, retained all cutting rights to the land outside the settlement area apart from the recognized right of settlers all around the island to cut firewood on a three-mile reservation. It is also worth noting that pulp logging in this region has been exclusively carried on from interior locations such as Harry's Brook and Spruce Brook, accessible by railway rather than from the coast. Thus, although the resource base for a logging and lumbering industry existed on the threshold of Point au Mal, it was one that was of little benefit.

The families resettled at Point au Mal all stemmed from fishing villages in Placentia Bay (Fig. 2.2). Most of them were expected to continue fishing in their new location (FOC/NA/106/1943; see also Wonders, 1951; 160). The main

marine resources which offered some scope for fishing activities in Port au Port Bay included lobster, herring, smelt, cod, and scallop. Environmental conditions associated with settlement, rather than those connected with the nature of the fish resources themselves, presented certain difficulties which are not at all dissimilar from those at Lourdes. Not the least of these problems is the lack of a good natural harbour. What fishing operations were carried on were undertaken in small flat-bottomed boats from the outer coastal beaches. There is no evidence of any attempt to dredge the lagoon, Two Guts Pond, to make small boat shelter (Fig. 3.4). Even if this were done, drainage of the surrounding marshes would be required to provide a landward approach.

The development of primary local resources at Point au Mal does not appear to have progressed beyond the stage at which it stood when government withdrew active support in 1941. Indeed the main opportunities and means of acquiring a livelihood have tended to be external, from outside the settlement, rather than internal. No additional land has been cleared since 1942. Fishing has carried on only as a part-time or casual activity, and without any significant improvement in technology. Sawmilling did not survive beyond the removal of government administration.

Compared with 38 families established in the land settlement in 1939-40, the 1969 occupancy numbered 16

householders, of 83 persons (Table 2, Appendix C). In the adjacent and older voluntary area of Point au Mal, the number of occupied dwellings and total population in 1969 were 7 and 45, respectively compared with the 4 families of 23 persons recorded in the 1935 Newfoundland census. The Census of Canada for 1966 recorded a population of 205, as compared with 126 enumerated by the writer in July 1969. The change represents a population decline of about 45 per cent within three years. The chief factor in producing this decline has been the evacuation of the settlement by families moving into Port au Port and Stephenville under the present government resettlement program. Many of these include original land settlers. In other words the same motivating force which has recently added new families to the land settlements of Haricot and Winterland is producing out migration in Point au Mal, and one that may very well lead to the demise of the settlement altogether.

An interesting aspect of the land settlement scheme as a whole is that, studied at different periods, judgments of success or failure have necessarily to be tempered by both the current and changing socio-economic situation. For example, the economic situation at Point au Mal according to Wonders in 1951 was quite different from that examined in 1969. Wonders writes of families having 10 acres of agricultural land, working at Stephenville on base and engaging in a lucrative lobster fishery (Wonders, 1951; 160).

The 1969 situation was quite different. Abandoned dwellings, barns and land holdings were more numerous than those occupied and used. Only six persons out of a potential labour force of 45 were employed, three persons within the settlement and three elsewhere. Two fishermen, both unrelated to the land settlers, the one an 18-year old boy and the other a 51-year old bachelor, were fishing for lobsters and scallop. While it was possible to gather data for 16 families still remaining, four of these were preparing to relocate. Several others were uncertain whether or not they would resettle. However, those with children attending school said that they would remain in Point au Mal as long as the school board agreed to operate a school bus or they were offered a reasonable opportunity for steady employment. As one informant put it

I can eat my dole just as well here as at Stephenville. If I had a job I would move. At Stephenville I would get \$15 a month for oil. Here I can get most of my own firewood. As long as the kids can get to school, I will stay.

Relative Location and External Contacts

State-sponsored settlements during their construction phase are in varying degrees closed institutions, that is, administratively isolated. Management usually assumes various measures of control and regulation over the lives of the selected settlers and hence their contact with the outside world. Ultimately the settlement has to integrate

with neighbouring settlements within the region and establish transportation and communication links. The success and failure of land settlement schemes, as with spontaneous or unsupervised settlement, can often be related to its adjustment and interlinkage within a region. Administrative isolation and government support can only ensure the continuance of settlement for a brief period and trust that the economic inertia created under support can sustain the settlement. In the long term each scheme must struggle on its own merits, within an enlarged economic and social milieu. The passage of time may bring improved transportation and technical innovation which alter relative advantage. Short-term failures or successes under state-sponsorship can be and are often altered and reversed by the long-term success or failure of the region. Thus quite separately from the internal settlement sets of relationships to resource development and utilization of its territory, there are others which can be termed external relationships. The more important these external transactions, the greater significance attaches to access and transportation to provide for the movement of persons, the interchange of goods, and services.

At the time the land settlements were started the main transportation and communication network of Newfoundland was maintained by coastal boats and the railway. Roads were very few. Those that did exist were mainly of narrow gravel

and winding design, uncleared during the winter and suitable only for horse or dog team traverses during the autumn, winter, and spring. Summer transportation using trucks was usually possible, but there were few powered-wheeled vehicles on the island at the time, and inter-settlement transport by car almost completely unknown. Freight charges were very high where trucks were used. Inter-settlement connections were minimal and confined mainly to the movement of men seeking employment in other parts of the island, and the hospitalization of the critically ill. Poor travelling conditions during the winter and spring made it necessary to lay in essential food and clothing requirements during the autumn to last for periods of up to six months. The regularity of mail deliveries often depended upon weather and travelling conditions. The marketing of goods produced in a settlement was generally limited to the more favorable circumstances of transportation media in the summer and autumn periods. The most reliable and regular means of year round transportation during the 1930s and 1940s was the railway, which consisted of a single main line linking the western terminal of the island at Port aux Basques to St. John's, the chief seaport and capital city on the east, and swinging northward along bay heads to serve coastal settlements. Distance to the railway and local means of access can generally be regarded together as a measure of the relative isolation of each settlement.

Table 3.2

Distance and Access of Land Settlements to Newfoundland Railway
during period of Construction

Settlement	Distance to Railway miles	Chief Access Routes to Station (Summer)
Markland	3	Road to Whitbourne
Haricot	20	Road to Whitbourne
Lourdes	40	Road to West Bay, Boat to Port au Port, road to Stephenville Crossing
Midland	1	Road to Pasadena
Brown's Arm	18	Boat to Lewisporte
Sandringham	18	Road to Alexander Bay
Winterland	57	Road to Marystown (7 miles), Boat to Argentia (50 miles)
Point au Mal	23	Road to Stephenville Crossing via Port au Port

Alternative Means of External Contacts to Railway

	Distance miles	Route
Markland	70	Road to Conception Bay and St. John's
Haricot	90	Road to Conception Bay and St. John's
Lourdes		
Midland	(15	Road to Corner Brook built 1936
	(18	Road to Deer Lake built 1936
Brown's Arm		
Sandringham	4 +	Road to Eastport, thence by sea to St. John's
Winterland	(7 +	Roads to Marystown and Burin, thence by sea.
	(5 +	Road to Garnish
Point au Mal	7 +	Road to Port au Port, Stephenville and environs.

In terms of distance alone the sites of the land settlements varied between 1 mile at Midland to 57 miles at Winterland from the nearest railway station (Table 3.2). The technology of local transportation and alternative external links, however, tended to modify the effects of isolation and costs of transportation resulting from the absolute distance of a particular settlement from the railway. Lourdes and Brown's Arm, for instance, had no regular external transportation links apart from that afforded by the railway which was accessible locally only by boat. In his examination of these two settlements in 1938 Gorvin noted that transportation was quite inadequate and a chief factor in preventing these settlements from becoming fully self-supporting (Gorvin 1938a; 5). In 1939 a road was constructed from Brown's Arm to Lewisporte, and in 1941 a road from Lourdes to Port au Port.

The prospects of developing markets for farm products were not particularly favorable for many of the land settlements. Lourdes and Point au Mal were both located within a region that was largely self-sufficient in vegetable and livestock products. One of the most important agricultural regions on the island, that is the Robinson's - Codroy Valley area lying immediately to the southeast, had far better access to the Corner Brook and other major markets to the east. Midland was located near two centres

of industrial populations at Corner Brook and Deer Lake. Brown's Arm settlement offered fair possibilities for the development of a market for produce in the Grand Falls - Botwood area, yet it does not seem that this market was exploited beyond the earlier years when the land managers acting as an agent for the settlers contracted to sell produce to the paper company logging camps.

It was suggested in Chapter I that the improved economic conditions which accompanied World War II through enlistment, base construction, and the great demand for Newfoundland fish, wood and mineral products ended mass unemployment and the need for rural reconstruction programs such as land settlement. Base construction had a particularly over-riding effect upon some of the established land settlements and changed the direction of those economic activities which previous government efforts had promoted. Most of the settlers at Markland and Haricot acquired work as semi-skilled labourers in the construction of the Argentia USAF Naval Base. Some settlers acquired permanent employment in maintenance and services. A similar pattern was followed by the settlers of Lourdes and Point au Mal in the building and maintenance of the USAF Air Force Base at Stephenville. Though the bases brought a relative degree of prosperity and security, for many it was brief, yet it was long enough to erode any chance they might have had to become successful farmers or fishermen. Except for the few who acquired

permanent employment for the duration of their lives or a pension upon retirement, the long term effect of the bases on the settlements dependent upon them for employment has been the fossilization of local economic activities and retardation in the improvement of local technology. The closure of the Stephenville Air Force Base in 1966 left the Point au Mal and Lourdes settlements in a depressed condition along with the whole of the Port au Port region.

The Winterland settlement, though relatively isolated from the Newfoundland Railway, and relying upon road connection with coastal towns for outside contacts, was only slightly more isolated as a result of its inland location than the whole of the southern Burin Peninsula itself. There the existence of a few small towns such as Burin, Marystown, Garnish, Grand Bank and Fortune, based upon offshore fishing fleets and shore processing of fish products, provided the chief markets for vegetable production. To the time that Winterland began, the Burin Peninsula had very little farm production either in root crops or livestock, and no commercial farming settlements. Although some of the land settlers worked for brief periods at the Argentia Naval Base during 1941, this did not last. The travelling distance to Argentia covered about 60 miles, partly by road and partly by sea (Table 3.2). Beyond the seasonal winter work it provided during the early phases, the base did not seriously affect the economic activity of

the settlement. Rather Winterland settlers developed a relatively successful farming venture in the security of markets in which they had no local competition.

Location, accessibility, and distance from neighbouring settlements and towns represent the physical elements of isolation. Perhaps a more important aspect of isolation, which can here be alluded to briefly, is the perception of the settlers toward their new settlements. To the individual, isolation is frequently as much psychological as it is real. For instance the feelings of deprivation were obviously more upsetting and less tolerable to the urban housewife at Markland who was cut off not only from the city but also from relatives and friends, than to the housewife at Lourdes who had previously lived under similar conditions, perhaps even worst circumstances, and was even after moving among well-known acquaintances, kith and kin. Similarly settlers who elected to go to a land settlement and had some knowledge prior to becoming a settler, of the area chosen for settlement, as in the case of the Sandringham and Winterland settlers, were less likely to feel isolated in their new homes or disillusioned at what lay ahead, than the families who went blindly from Conception Bay to Brown's Arm or Midland, or from Placentia Bay to Point au Mal. In all instances the settler's wife had to face hard work, plain living and a meagre social life.

Regarding the need for external contacts and relationship, Chisholm writes:

only an entirely self-sufficient community has no need of regular friendly external contacts. Such communities probably no longer exist and in any case have never been particularly important except in remote times. Most peoples have friendly contacts of one kind or another with their neighbours and facilitating such intercourse is a cogent consideration in the choice of a location; certainly it has become increasingly important with the passage of time, as the degree of local self-sufficiency has declined.

(Chisholm, 1966; 107)

The reclamation of land in the neighbourhood of existing settlements and the resettlement of families, especially when they were selected from the non-local region, did very little to promote friendly contacts between new and old settlers. Administrative isolation and protection, the expenditure of government funds to assist a few selected families (often, as at Lourdes and Point au Mal, where earlier settlers were living in poverty and want), the alienation of land and resources, competition for the use of fishing or logging areas were facets of land settlements that did little to endear the newcomers to neighbouring communities. Midland, Winterland, Markland and Sandringham tended to escape more from the strained social relationships between the old and new settlers in that these settlements were established on land set apart and physically distinct from neighbouring settlements.

In 1934 the Commission of Government expressed confident optimism that a principal advantage of land settlements would be:

the influence which well organized settlements with good standard of living would exercise over their vicinities (FOC/NA/129/1934)

By 1941 it was still anticipated that the land settlements could form the basis for the diffusion of ideas:

The land settlement will be the model for the great majority of outport settlements in the district.... The land settlement has a two-fold purpose - it provides a home and living for unemployed in depressed areas, and, secondly, provides a nucleus for regional work in the district because of the model holdings and efficient use of land by the settlers (FOC/NA/81/1941).

Generally speaking, land settlements tended more to create ill-feeling between the old and new settlers than to diffuse sound farming practices and techniques. In some cases the tensions related to local circumstances of land ownership. Part of the Lourdes land settlement was carved from the privately owned land of an older settler, who did not willingly consent to the transfer (Warren, 1969, pers. comm.). In other instances the established settlers felt very frustrated. They saw the land settlers as a privileged group, supported by the charity and benevolence of government while they themselves were struggling alone and unassisted in wresting a meagre living from the land and sea. Most land settlements as a unit were thus attached a social stigma that one can observe frequently

today directed toward families on welfare assistance, and this tended to provide a social cleavage particularly in those communities where old settlers and land settlers lived side by side.

Considering all the land settlements, regional location appears to be the most important of the environmental influences affecting the growth and development of individual schemes. This is not to say that local or territorial environmental influences and material resources were not important. Even at a time when work alternatives elsewhere were very limited, Haricot proved to be an unattractive settlement, for it had little material resources to offer for development. Outgoing settlers were not replaced. The initial group of settlers at Brown's Arm followed a similar pattern. However, this land settlement area here was attractive enough to entice replacement by families from the Notre Dame Bay area. The ease of acquiring base employment from Lourdes, Point au Mal, Markland and Haricot undoubtedly tended to undermine the establishment of a local farming economy and tradition which normally takes sustained effort over a long period. Point au Mal appears to have been the most adversely affected by this influence, at least in the long term, and this seems to have had the general effect of prolonging the period of achieving any degree of stability. The present

process of resettlement to some extent reflects the lack of attachment to the settlement as well as the weak nature of the settlement's economic position.

Initially the contrast in environmental and social conditions between the old and new habitats of settlers had a greater influence in producing feelings of isolation than any real physical isolation. All settlers had adaptations to make, even where the settlers pursued the same occupation as they had previously. For some, particularly the wives, the social adjustments were far more difficult than for others. Some settlers appear to have expected something for nothing, and were not prepared to assume the demanding role of the speculative farmer who was gambling on marginal lands, difficult forested tracts and various experimental schemes. For many the easiest way was to move out of the settlement either for easier money or the more secure social comforts of familiar and less trying surroundings. Those settlers who, like the government, believed that the key to instant farming success would be easily and quickly found and that environmental forces would yield easily, were often more quickly disillusioned about the chances of economic security in land settlement than the government. On the other hand, there are those settlers who persisted in gaining a living from their small holdings. Sandringham and Winterland had, and still have, some excellent examples.

CHAPTER IV

THE MARKLAND EXPERIMENT

Introduction

The present chapter and the two that follow are each divided into two sections. The first section discusses the demographic and landscape structures of the land settlements between their origins and 1945. This time period was selected for reconstruction for the following reasons: Between 1934 and 1945 all of the state-initiated projects considered in this discussion were begun and completed. Management, financial and direct technical assistance were withdrawn by 1942, and the Land Development Act was passed in 1944 to provide for the issuing of land grants to the settlers. The first completed census including all the land settlements was taken in 1945.

Much of the data used to analyze the earlier period was collected from field interviews with participating land settlers during visits to the various land settlements in the late spring and summer of 1969. Cadastral survey maps on the scale of 1 inch to 500 feet, drawn by Crown Lands and Surveys Division, during the land settlement project period, were obtained and used as base maps to reconstruct original settlement forms, land clearances, field boundaries

and other basic changes in the landscape. Lists of settler names were taken from grants issued under the Land Development Act, and where these were not complete for the original group of settlers, land settlers were sought out to assist in completing the roll. Using this technique, it was possible to secure both qualitative and quantitative data on settler origins, occupations, family size, religion and age. Both before and after conducting field research, informal consultations were sought with persons residing in St. John's who had acted in various official capacities in the Commission of Government land settlement schemes, and these proved to be of considerable value.

The second section of each Chapter brings the discussion of the land settlements into the present time. Most of the data collected to analyze the present demographic and landscape structure of the settlements were gathered from a household questionnaire which was administered parallel with field research into the origins of the settlements. All occupied dwellings within the limits of the land settlement areas were covered with the questionnaire. The main purpose of this data collecting process was to analyze the end results of processes in settlements which government had initiated, but which, if it were the case of those settlements as with other rural settlements in Newfoundland, have undergone rapidly accelerating

changes since 1945, and more especially since Newfoundland became a Canadian Province in 1949.

Chapter IV deals with the making of Markland.

Chapter V considers the Minor Land Settlements and Chapter VI, the Small-Holding Land Settlements.

A. Population Structure and Landscape Development, 1934-1945

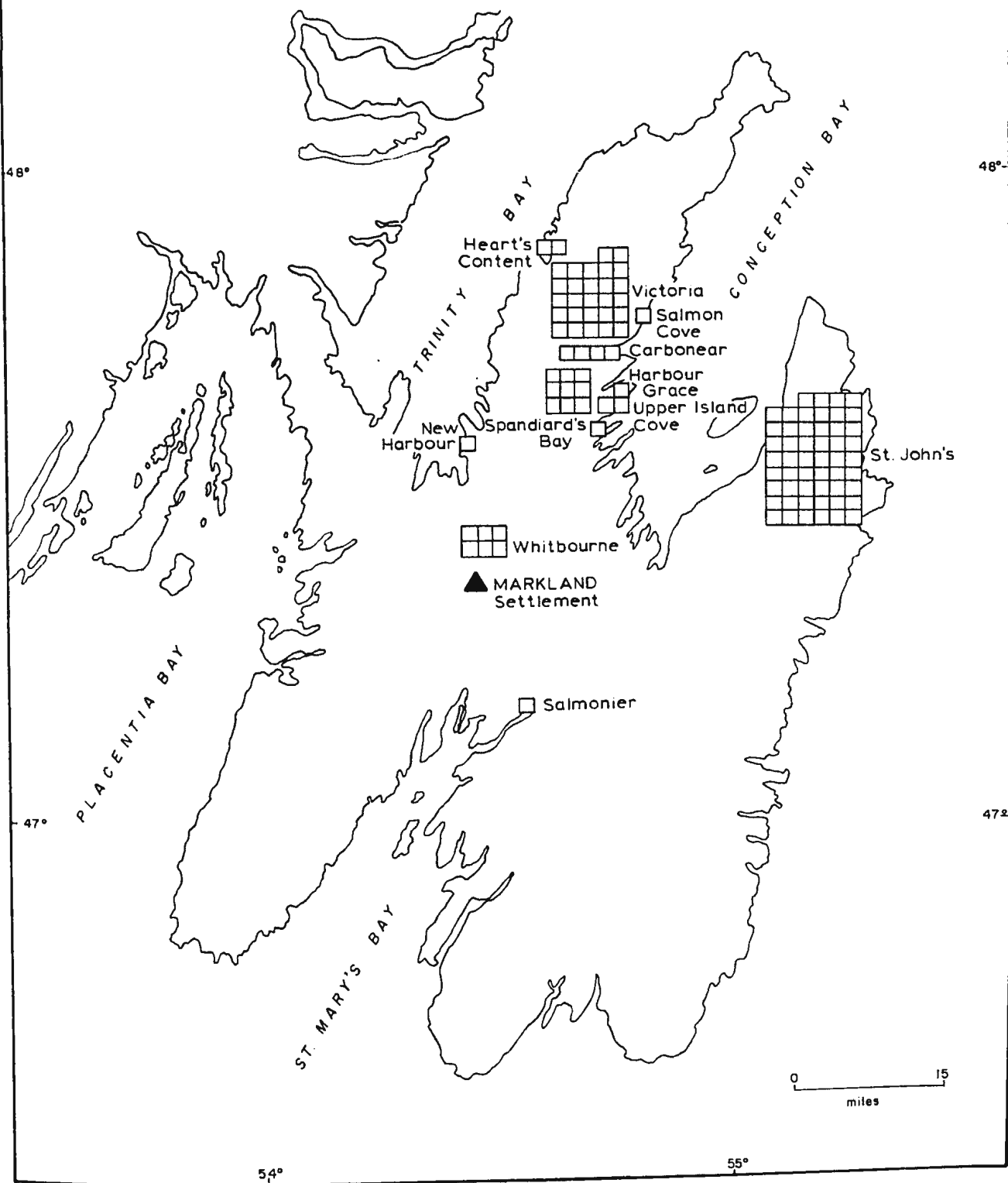
Settler Distribution by Origin and Background

At varying intervals between May 1934 and August 1935 some 120 families, a total population of about 600, were resettled within Markland. These families stemmed from more than a dozen separate settlements on the Avalon. Using the technique described above, it proved possible to identify the name and origin of 107 families, or about 89 per cent of the total number of families. More than three-quarters of those families identified came from two parent settlements; 52 families (49 per cent), from St. John's and 27 families (25 per cent), from Victoria in Conception Bay. Another 24 families were selected from other settlements in Conception Bay and the remainder from Trinity Bay and St. Mary's Bay (Fig. 4.1).

Apart from their common poverty, the settlers shared few similarities in their social and cultural background. Most had been previously of a semi-skilled or unskilled class of workers, yet even in this category there

ORIGIN OF MARKLAND LAND SETTLERS 1934-5

Each square represents one family unit



were wide variations of type. St. John's settlers ranged from taxi-drivers to common labourers, from carpenters to factory workers. Victoria and other Conception Bay settlers were predominantly miners. Some had worked in the iron ore mines of Bell Island; others had previously commuted seasonally to the coal mines of Cape Breton Island.

Tables 4.1 and 4.2, showing the distribution of settlers according to denominational affiliation,¹ clearly demonstrate the heterogeneous religious structure of the population.

Table 4.1

Distribution of Markland Settlers by Denomination, 1934-5

<u>Religious Denomination</u>	<u>Number of Families</u>	<u>Percentage of Identified</u>	<u>Percentage of Total</u>
Church of England (Anglican)	29	27	
Roman Catholic	35	33	
United Church	41	39	
Salvation Army	1	1	
Total Identified	106		89
Unidentified	14		11
Total Number of Families	120		100

Source: Field Enquiry, 1969

Table 4.2

Religious Structure of Markland Settlers¹ 1935

<u>Religious Denomination</u>	<u>Number of Persons</u>	<u>Per Cent</u>
Church of England	184	29.0
Roman Catholic	160	25.0
United Church	252	40.0
Salvation Army	22	3.4
Pentecostal	9	1.4
Presbyterian	8	1.21
Total Population	635	100.0

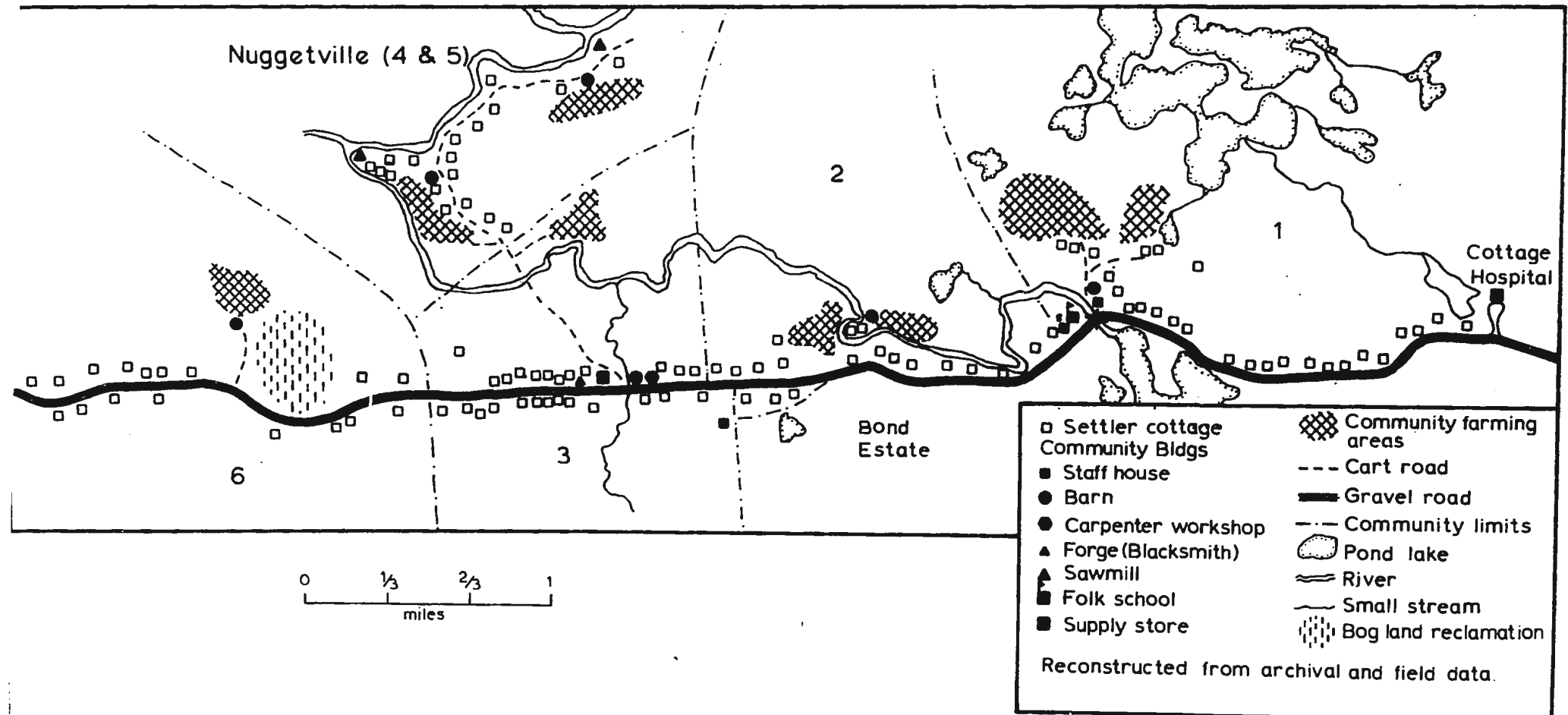
Source: 1935 Newfoundland Census

1. Includes the Land Settlement Managerial Staff which according to the Newfoundland Directory (1936) of the Labour Force for 1935 numbered 26 persons.

The distributional pattern of the settler population within the settlement according to origin and denominational affiliation was naturally dependent upon the pattern of settlement, which in turn was either ordered or permitted by the settlement administration. In this latter consideration terrain and soil differences along with accessibility appear to have played a basic role in ordering the spatial arrangement. House sites were originally selected within wooded areas along the main road

Figure 4.2

MARKLAND SETTLEMENT PLAN 1935-36



frontages and variable spaced to allow each family a small holding of mineral soil but with no prior survey to define field boundaries. A partly constructed cottage generally formed the only improvement made before the family occupied a location.

Figure 4.2, reconstructed for the period 1935-6, indicates the general plan of Markland and the distribution of settler cottages. Once most of the settler cottages were constructed and inhabited, the distances between various sections of the settlement necessitated administrative subdivision for the purpose of supervision. Consequently the inhabited area was divided into six communities and numbered. Communities numbered 1, 2, 3 and 6 lay accessible from a six-mile frontage of the Whitbourne to Colinet road, whereas communities 4 and 5 were situated on a branch woodsroad extending over two miles to the south-west of the main road. These two communities were combined in 1935 and locally named "Nuggetville" (Fig. 4.2).

Management determined not only the general morphology of settlement but also the distribution of families. Insofar as individuals were concerned, their time of arrival, a chance drawing by lot, or the appointment of a dwelling and location by the manager usually decided where they would live. Tables 4.3 and 4.4 show the percentage distribution of original settlers within the

Table 4.3

Percentage Distribution of Markland Settlers
by Major Denomination, 1935

Denomination	Community No.					Total
	1	2	3	4 & 5	6	
Church of England	14	7	35	27	17	100
Roman Catholic	29	17	29	8	17	100
United Church	34	27	12	15	12	100

Source: Field Enquiry, 1969

Table 4.4

Distribution of Markland Settlers by Place of Origin, 1935.

Place of Origin	Community No.										Total No.	
	1		2		3		4 & 5		6			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
St. John's	16	31	7	14	17	33	3	6	8	16	51	100
Victoria	8	30	8	30	2	7	4	14	5	19	27	100
Harbour Grace	-	-	-	-	6	67	1	11	2	22	9	100
Whitbourne	2	33	1	17	-	-	3	50	-	-	6	100
Carbonear	1	25	1	25	-	-	1	25	1	25	4	100
Other	1	10	2	20	-	-	6	60	1	10	10	100
No. of families	28		19		25		18		17		107	

Source: Field Enquiry, 1969.

communities by major religious denomination and place of origin. It is quite obvious that very little effort was made to group settlers by common cultural characteristics. Roman Catholic families were distributed over all six administrative communities as were families of Church of England and United Church affiliation. A similar diffusion of settlers was effected according to place of origin (Table 4.4). The diffused pattern of settler distribution by origin is exemplified by the four Carbonear families who were placed in four separate communities.

In a spatial/distance context the pattern of initial occupancy at Markland was one of high dispersion. From a social and cultural viewpoint it was even more dispersed. The pattern of settlement had many socio-cultural implications. Some of these included (1) the necessity of providing two schools to relieve the effect of distance from the dwellings of the various families: even then it was found necessary to provide transportation either by truck or horse team for children who lived as far as two miles from a school, and to have children take their mid-day meal at school; (2) the necessity to depart from education by denomination and provide amalgamated schools: although not the first such schools on the island, it would appear that it was one of the first attempts to amalgamate Protestants and Catholics.¹; (3) the problem of settlers in exercising religious practices: although all churches were

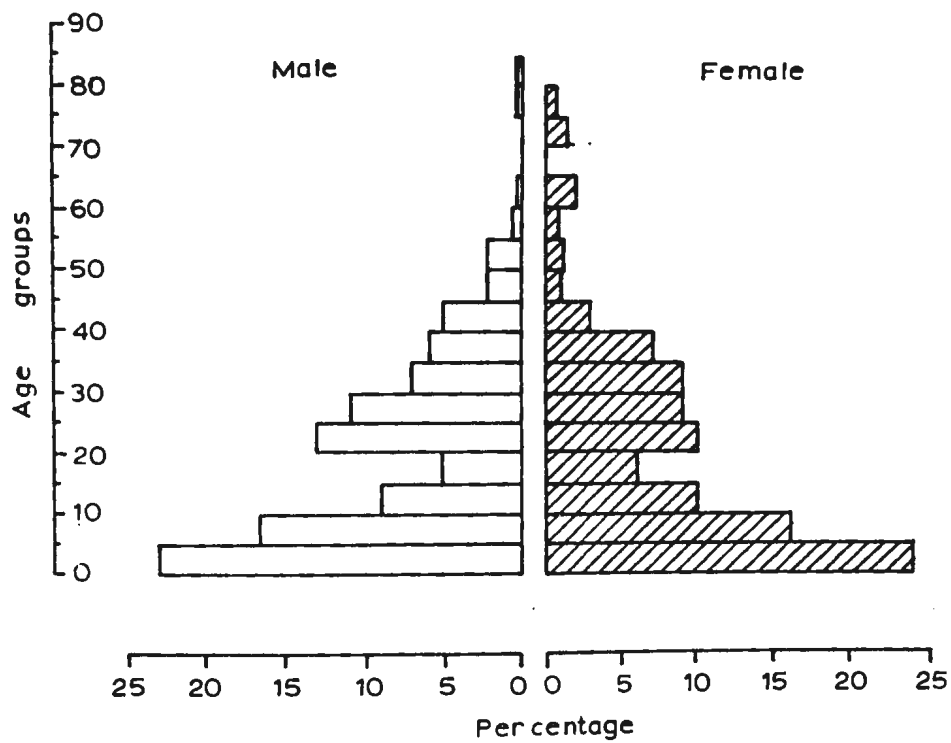
allowed free access to conduct services in the schools, the number of families of some denominations were few, and of other denominations highly dispersed, United Church families at Nuggetville, for example, living up to two miles distant from No. 3 school, and from five to six miles from No. 1 school (Fig. 4.2); and (4) the problem of physical and social isolation: apart from the spacing of dwellings, or nearest neighbours, which varied but in a few cases were up to one half mile, most settlers were unable to see the next dwelling for the surrounding trees. This last was not a problem that time and the axe could not remedy, yet it contributed to feelings of isolation and social unrest, particularly among the women from St. John's and indeed even among women from small villages who had grown up and lived in agglomerated settlements. One Markland pioneer wife from St. John's recalled having sobbed for months in her feelings of despair, another stated, "I was alone in the middle of nowhere. If anything went wrong when my husband was on community (that is, working on community land) I could not even shout to the neighbours. I was always scared of a forest fire and the trees were so close." Once in the settlement, families not only found themselves in relative physical isolation but also often separated from families with whom they shared some common ties through kinship, friendship, religion, or place of origin. Overall, Markland

as a social unit represented a complete break with the traditional Newfoundland rural settlement, but then, this was what it was intended to be - an experiment to effect the social reorganization of the country.

The age-structure of the Markland settler population in 1935 is presented by percentage of male and female in five-year age cohorts in Figure 4.3. It could be noted that the Newfoundland Census taken in the summer of 1935 roughly corresponds with the time at which the original settler population reached its peak. Both the number of families (122) and the total population (635) exceed official enumerations recorded for any other time. Two families and about 25 persons altogether included in the total population represent management personnel. However, these do not prevent drawing certain valid generalizations from the census data concerning the population structure of the settlement as a whole.

The main purpose of considering age groups is to determine economic and social dependence. For example, the young (0-14 or 0-19 years) and the aged (60 and over, or 65 and over) are more or less dependent on adults, the middle group (15-59, 15-64, 19-59 or 19-64 years) (Clarke, 1965; 63-64). A unique feature of Markland in 1935 was that the total population was dependent on government. Nevertheless the scheme aimed at the economic rehabilitation of male family heads from the 20-25 age group to the 60-65 age group,

Percentage of total male and female population in five year age cohorts for Markland 1935



but who in the main were younger than 45 years (Fig. 4.3). The approximately equal distribution of both male and female in age groups between 20 and 45 years which decline from lower to higher groupings is reflected back in the narrowing base of young age groupings between 0 and 19 years. If we take the age of 14 years to indicate the non-productive and most dependent part of the population, we find that this group represents about half the total. In terms of male work units it appears that few families had more than the lone head of the family. This generalization is based partly upon the small proportion of males in the age-group of 15-19 years.

Population Changes 1935-1945

One of the worst demographic features of Markland was the degree to which settlers tended to drift away from the settlement. During the intercensal period 1935-1945 the population declined from 635 to 395, and the number of families from 122 units to 70 units.

Outmigration of original families was the main cause of the loss of population and few new families were recruited outside to take their places. There are indications that a reduced number of families was encouraged officially. Out of the 70 families resident in 1945, only 56 were among the original group of 1934-5 settlers. The remainder consisted mostly of sons or original settlers who

had married in the interim and replaced outgoing families by occupying vacant dwellings and land lots. These represented locally a form of internal migration.

Selectivity of outmigrating families by origin and religion can be assessed from Tables 4.5 and 4.6. Data in both these tables were compiled from field reconstruction. Table 4.7 shows the percentage change by denomination for the total population 1935-1945.

Table 4.5

Outmigration of Markland Settlers 1935-1945
by Place of Origin

<u>Place of Origin</u>	<u>Families Leaving</u>	
	<u>No.</u>	<u>Per Cent of original</u>
St. John's	30	58
Victoria	12	44
Harbour Grace	2	22
Whitbourne	3	50
Carbonear	2	50
Other places	2	20

Table 4.6

Outmigration of Markland Settlers 1935-1945
by Religious Denomination

<u>Denomination</u>	<u>Families Leaving</u>	
	<u>No.</u>	<u>Per Cent</u>
Church of England	11	38
Roman Catholic	20	57
United Church	18	48

Table 4.7

Percentage Change in Religious Denominational
Structure of Markland 1935-1945

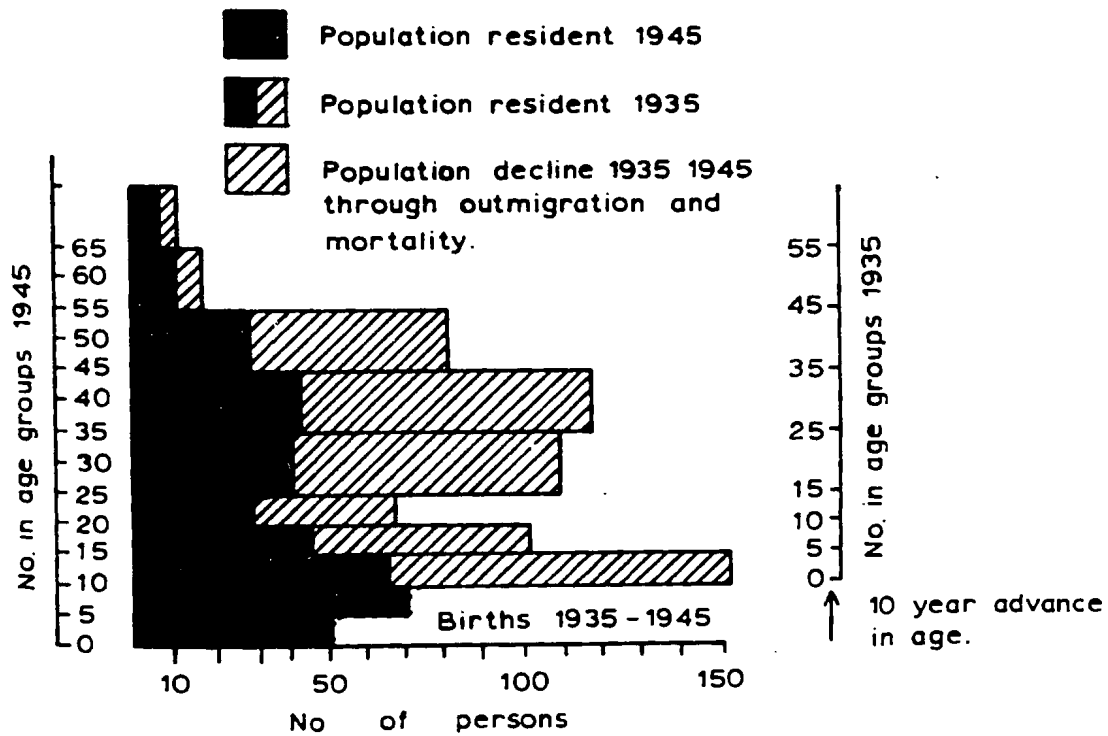
<u>Denomination</u>	<u>Persons</u>		<u>Percentage Change 1935-1945</u>
	<u>No.</u>	<u>Per Cent</u>	
Church of England	154	37	+ 8
Roman Catholic	77	19	- 7
United Church	158	40	0
Salvation Army	1	1	- 2
Pentecostal	5	3	+ 2
Presbyterian	-	-	- 1
Total	<u>395</u>	<u>100</u>	<u>0</u>

Source: 1935, 1945 Newfoundland Censuses.

Available evidence tends to indicate a greater propensity toward outmigration by St. John's settlers (Table 4.6) and by Roman Catholic families (Table 4.7) than by settlers from other places or denominations. Yet outmigration was by no means confined to these two categories. Population changes only slightly altered the religious structure of the settlement (Table 4.8).

Figure 4.4 compares selected age-group categories of 1935 advanced by 10 years for selected age groups enumerated in 1945, and purports to simulate what the age-structure would have been in 1945, barring population changes produced by migrations or mortality. Together with the percentage change of population for selected age groups shown in Table 4.8, it is possible to draw some general conclusions concerning the population retained in 1945 and

Population change by age groups in Markland
1935-1945



the out-migrating component between 1935 and 1945. Out-migration involved all age groups but was most strongly effective in the young and middle age categories.

Proportionately the 1945 population was both younger and older, and thus proportionately more dependent than the original 1935 population (Table 4.8). This tends to suggest that the younger and smaller adult families showed more inclination to leave than the older and larger families.

Table 4.8

Percentage Change in Markland Population 1935-1945
by Selected Age-groups

Age Category	Percentage		Change (% + or -)
	<u>1935</u>	<u>1945</u>	
0 - 19 years	55	58	+ 3
20 - 44 "	40	30	-10
45 - 64 "	4	10	+ 6
65 over	1	2	+ 1

The settler population which eventually took root at Markland appears to have been one which had a higher dependency ratio than that with which the settlement began. By 1945 more than half the original settlers from St. John's had left, yet the residual population was one mainly drawn thence. Roman Catholic families were reduced by more than half in the first ten years and most of the families

of the smaller Protestant denominations had left. Despite these changes, the population was still very much a mixture of persons of different denominations.

In terms of the influence of demographic change on settlement patterns, the population in 1945 was even more dispersed than that in 1935. The settled area still extended over the same distances, for out-migrating families thinned out the number of occupied dwellings in each of the administrative communities (Table 4.9). The extent of settlement was as great in 1945 as in 1935, but the numbers of persons and dwellings were reduced.

Table 4.9

Change in the number of Occupied Dwellings at
Markland by Community 1935-1945

<u>Community</u>	<u>Dwellings</u> <u>1935</u>	<u>Occupied</u> <u>1945</u>	<u>Change</u>
No. 1	28	12	- 16
No. 2	19	11	- 8
No. 3	25	21	- 4
Nuggetville	18	16	- 2
No. 6	17	10	- 7
Total	<u>107</u>	<u>70</u>	<u>- 37</u>

Source: 1935 see Fig. 4.2

1945 List of Grants issued under Land Development
Act (1944), Crown Lands Office.

Transforming the Landscape

The decision to proceed quickly with the Markland land settlement scheme was taken at a time when government believed that quick action was demanded to deal with a critical unemployment problem. Having seen the first ten settlers clear half an acre of land without mechanical aid in a few weeks,² the government was convinced that successful land settlement could be accomplished very easily and economically within two years. Urgency to act dictated that no time was to be lost or that account be taken of all the factors that would bear upon the establishment of farms on difficult land. Operations had to be imposed; there was no time for them to evolve.

The first need in the transformation of a previously unsettled region was to provide the physical elements of family accommodation. Land clearing, soil improvement and development of agricultural activity were required to provide the economic base for settlement. The introduction of the first families created an immediate need for facilities to fulfill social, commercial, educational and religious functions. Generally the final phase of successful settlement under supervision requires that each family be given rights of tenure to a home and legal ownership to land held communally or privately or both.

Buildings

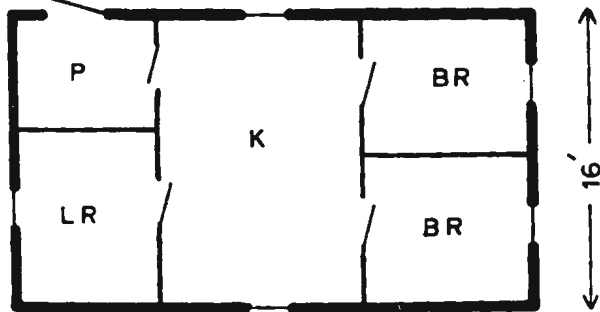
The only provision made for settlers at Markland prior to arrival was, as previously mentioned, the partial construction of houses. The standard plan of dwellings developed there by the first land manager, Mr. R.H.K. Cochius, was adopted and subsequently copied in the development of all other land settlements. Some of the first houses, mainly those built by the first ten, were completely constructed by the settlers themselves. Most of the 120 dwellings were built by contract (Gorvin 1938a; 14). A group of five carpenters usually spent three days framing the house, and putting on roofing and clapboards. Interior work was limited to the partial completion of the kitchen and one bed-room. At that point a family was given the dwelling and provided some additional materials to make it habitable. Families who had some household furnishings, a stove, cook-ware, beds etc. were assisted in bringing these items into the settlement. The majority of families apparently arrived without any household goods whatever and had to be provided with stoves, beds, blankets and all other essential elements of housekeeping.

The approved dwellings consisted of two basic types. Settlers with three children or less were given a two-bedroom cottage. Those with more than three children were given a three-bedroom cottage (Fig. 4.5).

BASIC FLOOR PLANS OF SETTLER COTTAGES

2 bedroom cottage

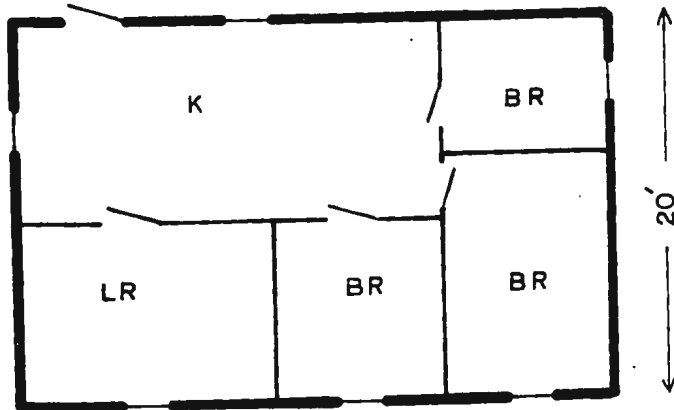
← 28' →



BR Bed Room
K Kitchen
LR Living Room
P Porch

3 bedroom cottage

← 30' →



(NOT TO SCALE)

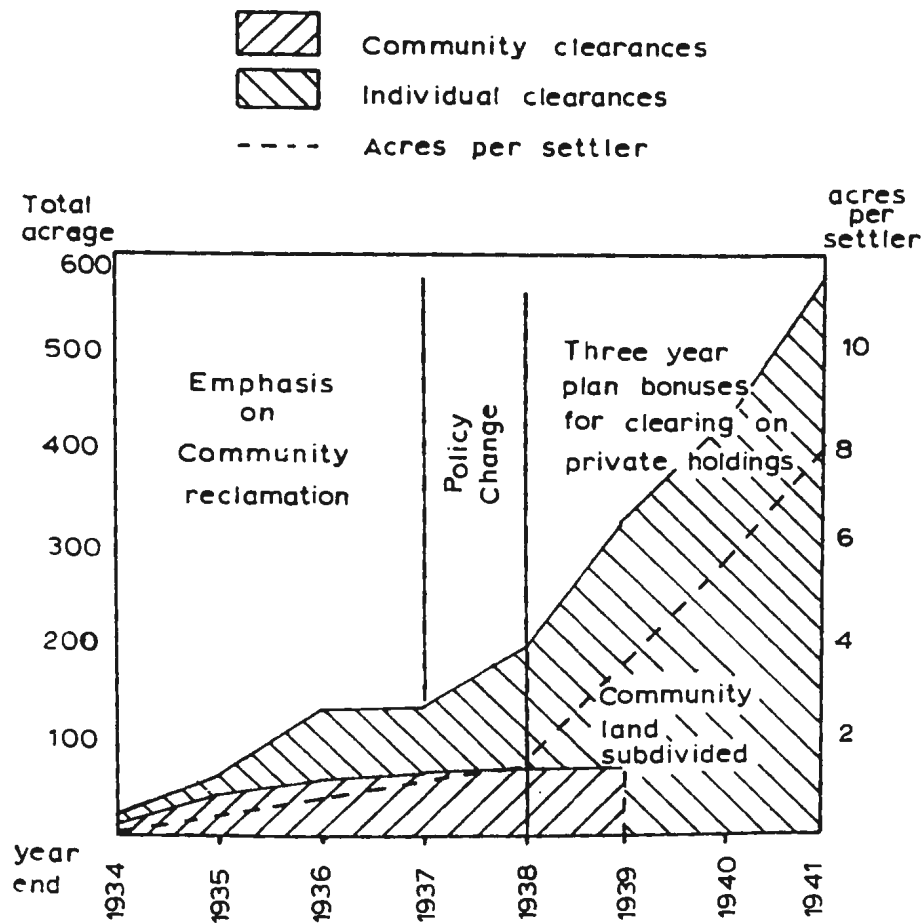
Apart from the settler cottages, the most prominent architectural features of the early cultural landscape were the buildings constructed for settlement management accommodations, communal activities, and for commercial, health and educational services. Figure 4.2 indicates the distribution of those structures about 1936.

In 1938 Gorvin noted that individual lots were mostly devoid of barns, a function of the lack of livestock, but that most settlers possessed small poultry houses among their various outbuildings (Gorvin, 1938a; 14, 20). Most of the outbuilding designs were those of the individuals themselves and, according to Gorvin and Hanley, were of very poor type and construction. In some cases abandoned houses were torn down and the materials used to construct outbuildings; in other instances these were used as they stood to house livestock and poultry or to store farm implements, tools and feeds.

Land Reclamation

Hanley attributed the lack of economic progress at Markland to the limited acreages which had been reclaimed for cultivable crops and a complete lack of pasture and hay land. Figure 4.6 shows that by 1937 the maximum improved acreage there amounted to about 140 acres, of which 60 acres were on communal land and 80 ($\frac{1}{2}$ to $\frac{3}{4}$ acres per settler) were on individual steads. Indeed very little

Expansion of area in cleared land Markland, 1934-1941



SOURCE: FOC/NA/1934-1948

progress was made until after 1938 when land clearing bonuses were offered as incentives to improve individual holdings under the three-year plan of revision. At the time government withdrew from the settlement the reported total cleared area amounted to 576 acres, or approximately 8 acres per family (Fig. 4.6).

Though seemingly the policy change from emphasis on clearing communal lands to emphasis on individual reclamation had a profound influence on the rate of progress, there were clearly other factors which limited development. These included technical difficulties in operating and servicing heavy equipment; the inexperience of the settlers, the supervisors, and the machine operators in land clearing procedures; the natural environmental factors discussed in Chapter III; and a generally apathetic attitude on the part of a great many settlers to working under the supervision of young and inexperienced college graduates whom they labelled "field larks".

As is the experience of most land settlement and state-sponsored colonisation projects, settlers entering Markland were at first enthusiastic, feeling that they were modern pioneers. Few were aware of what adjustments, hard work, and sacrifices would be required. Some regarded the settlement scheme in the same way they would regard a normal occupational opportunity, and taking the family

along formed part of the strategy of securing the job. These, of course, had no intention of becoming permanent land settlers. Communal farming fitted their particular aims as long as the weekly maintenance was sustained. Then, of course, there were the more ambitious, energetic and enthusiastic who were willing to acquiesce to the system, but who, when finding themselves carrying the work load of the recusants in community work, preferred to work harder on their individual lots and to approach supervised communal work more casually. The decline in the number of families from 111 in 1937 to 79 in 1938 does not at all seem to be unrelated to the change of government policy indicated in Figure 4.6 already referred to in Chapter II. This amply illustrates an important feature of state-sponsored settlements. Unlike spontaneous or voluntary settlements, policies, or political factors are an added dimension in a complex set of physical and social relationships. Like changes in the environment, material resources, or social systems, policy changes tend to evoke new responses and adaptations.

The introduction in Markland of tractors and bulldozers, and other mechanical equipment, to speed the process of land clearing in itself represented the introduction of technology hitherto unfamiliar and unused on the island.² Time was an essential element in

training personnel in effective operation and maintenance. Most of the machine operators and mechanics were recruited from among the settlers themselves. During the first few years much of the better potentially cultivable land was ruined by ineffective clearing procedures, more particularly where bulldozers with blade attachments removed much of the soil with the vegetation cover and deep ploughing with the breaker plough resulted in surfacing the subsoils. As suggested previously, steep slopes and soft surfaces limited mass land clearing procedures with heavy equipment to the gentler sloping and better drained areas. According to many informants, much of the early land clearing program at Markland was taken up reclaiming heavy equipment which stuck or broke down attempting to traverse difficult terrain or in unforeseen soft spots. Added to these delays there were frequent breakages of equipment and power failures, and more delay in effecting services or awaiting arrival of spare parts. Within a few years, albeit at great expense and the ruination of much land, Markland possessed one of the best labour pools of heavy equipment operators and mass land clearing skills in Newfoundland. Indeed in the long-term those who were fortunate enough to become selected for training as operators and mechanics were much in demand to clear land in the other land settlement schemes, in the initial development of American

Base sites, and in land clearing schemes fostered later by the government in other farming areas of the island. Markland itself became a service centre for government-owned heavy equipment, a function which it has retained to the present day.

The one example of bog land reclamation that went beyond the recommendation stage was that started in 1936 in Community No. 6 (Fig. 4.2). Following procedures detailed by Dr. W.G. Ogg of the Institute of Soil Research of Aberdeen, Scotland, who visited the settlement in 1935 at government request, drainage ditches were dug over about a 100-acre marshland area.³ Beyond this, the scheme proved abortive for reasons of prejudice, ignorance and technological inadequacy. Few among the management personnel or the settlers perceived that any good could ever result from bogland soils. The failure of the bogland project was rather unfortunate for here an opportunity was lost that was to cost the island 20 years delay in attacking its extensive bogland soils.

Land Tenure

A planned aspect of Markland initially envisaged the development of a system of land tenure which combined features of both communal and individual control. The averse response of settlers to the former eventually caused this policy to be changed in favor of a land holding system

based upon private ownership. Table 4.10 shows that under the Land Development Act (1944) some 100 holdings, ranging in size between 1 and 101 acres, were allotted to 70 occupants. Acreages per occupant ranged between 10 and 103 acres and the number of lots from 1 to 4. Over half of the occupants (53 per cent) received scattered parcels of land.

Variations in holding size represented an attempt to effect an equitable distribution of cultivable land with due regard to the physical properties of soil type, slope and drainage. Equity was apparently conceived of more in terms of quality (soil type) than quantity (acreage). Lots on the mineral soils thus tended to be smaller while those lots which occupied areas of 25 acres or more usually contained large proportions of marsh and poorly drained soil associations. Under the three-year plan Gorvin had suggested a holding size of 50 acres of which 25 acres would be cleared. When the program was instituted the government aimed at providing 8 acres of cleared land, but found that in order to achieve this sometimes 50 acres or more had to be set aside, or that fields at a distance had to be added to the farmstead land holding unit. The problem of land reform was made more complex because of the pattern of holdings and settlement development in the earlier years.

What were originally perceived to be the better farming areas were designed for community farming. Each administrative community had at least one such area,

Table 4.10.

Number and Size of Holdings in Land Settlement, 1945

Settlement	Total No.	<u>Land Lots</u>		<u>Land Occupants</u>		
		Range in acres	Average size	Total No.	Range in acres	Average holding
Markland	100	1-101	25.3	70	10-103	36.1
Lourdes	27	5-25	9.6	27	5-25	9.6
Haricot	19	1-37	14.7	15	9-65	18.6
Midland	29	9-35	28.2	25	26-39	33.2
Brown's Arm	37	1-27	16.2	23	21-59	26.0

Source: Crown Lands Office, St. John's, Nfld.

several had two (Fig. 4.2). In 1940 these areas, including 60 acres of cleared land, were resurveyed, divided into small lots - some as small as an acre - and placed under private tenure. For this reason some of the areas which might have formed a viable economic farming unit for several families were fragmented to such an extent that they were of little value to anyone. The distribution of houses and pattern of individual clearances formed another obstacle to enlargement of holdings, for consideration had to be given to families who had made land improvements around their dwellings and who had been promised eventual right of ownership.

Land Use

Little quantitative data are available on crop structure, and farm production in the various archival sources examined for Markland during the period 1934-1945. However, annual reports usually provide a summary of agricultural achievements and problems which are useful indicators of general trends. The following excerpts illustrate for 1938, 1939 and 1940

1938 3 3/4 acres cleared per family. Cultivation - growing potatoes, turnips and cabbages. Small number of livestock mostly community horses

1939 300 acres under crops during the year, half the acreage under hay and fodder, and the balance under potatoes, turnips, cabbage and other vegetables. Heavy frost in August unfortunately practically ruined the potato crop.

1940 Crops very good except for blight in potatoes of a few settlers ... sufficient forage grown to feed horses which were purchased from livestock bonus. Community horses disposed of.
(FOC/NA/81/1941)

It should be noted that there are certain dangers in attempting to read too much into what detailed quantitative data are available, especially those of the Newfoundland Census in 1945, and more particularly those for items such as total acreage, improved land, unimproved land and other phenomena having areal or spatial characteristics. For instance, the 1945 census returns for Markland indicate a total acreage of 551 acres; 132 improved, and 419 unimproved pasture and woodland, yet holdings granted under the Land Development Act totalled more than 2500 acres and the cleared acreages, for which bonuses were paid when the land was either under crop or grass amounted to about 576 acres in 1941 (Fig. 4.6).⁴

Until around 1940, emphasis was placed on producing root crops and the raising of such livestock as were not dependent upon pasture and winter fodder. Cows and horses were carried at government expense and stabled in community barns. Gorvin noted that barn expenses, including horse feeds, medicines, harness repair and replacements amounted to about \$4,500 per year (1938a; 21). Initial settlers were each given a pig and about eight hens (see 1935, Table 4.11). Apparently, these were disposed of and not replaced,

for Hanley in 1937 suggested that it was important to establish livestock and that poultry and pigs would be the easiest kind of livestock to start with (1937; 49-50). A second attempt to build up the number of poultry met with disastrous results, as indicated by the following which may also provide a clue as to the fate of the earlier poultry

Some time between 1938 and 1939 it was decided to operate an egg marketing pool at Markland. The intention was that the co-operative society should advance to each settler poultry feeding stuffs to a value of \$7.00. This figure was subsequently increased. The Department of Rural Reconstruction undertook to supply the poultry. On arrival at Markland many hens were immediately killed by the settlers and eaten (FOC/NA/149/1943)

The three-year plan stressed a greater amount of pasture and hay land so that cows and horses could be kept. Progress in this direction appears to have ended when the plan ended, for even allowing a wide margin of error in the 1945 Census returns on agricultural production, the number of horses and cows would have to be in error more than five-fold and ten-fold respectively for each family to possess one unit of each (Table 4.11).

In terms of land use it would appear that the main achievement under the land settlement scheme was the creation of the semblance of an agricultural landscape without any apparent worthwhile economic or social benefit being derived from it. Apart from potatoes and hay, the amount of agricultural production was far less than subsistence requirements.

Table 4.11

Agricultural Production at Markland, 1935, 1945

<u>Vegetable Production</u>	<u>1934</u>	<u>1944</u>	<u>Per Family 1944</u>
Potatoes, bushels	1,539	1,788	25.5
Turnips, barrels	99	88	1.3
Cabbage, pounds	18,200	-	-
Other vegetables, bushels	55	-	-
Hay Production, tons	-	95	1.4
<u>Livestock, number</u>	<u>1935</u>	<u>1945</u>	<u>Per Family 1945</u>
Horses	29	12	0.2
Cattle	6	6	0.1
Swine	58	1	-
Sheep	-	9	0.1
Goats	3	-	-
Poultry	414	101	1.5
<u>Crop structure, acres</u>	<u>1935</u>	<u>1945</u>	
Total improved	12	132	
Total Arable	12	19	
Potatoes	7	18	
Turnips	1	1	
Cabbage	4	-	
Hay	-	113	

Source: 1935, 1945 Newfoundland Censuses.

Services

A cottage hospital⁵ located on the northern periphery of Markland, two schools (one each in Communities No. 1 and No. 3), and a government general supply store represent the basic facilities built at Markland up to 1936 to furnish health, educational and commercial services (Fig. 4.2). In 1940 the government store was converted into a co-operative store and operated by a committee of settler directors. By 1943 the co-operative society was bankrupt and its charter was cancelled under the Co-operative Societies Act 1939.⁶ The government assumed control in an attempt to liquidate liabilities. The settlers, however, apparently refused to conduct business there and several settlers established their own small general stores.

The co-operative society was intended not merely as a distribution agency for consumer goods, but also as an integral part of the agricultural organization - particularly for the marketing of farm produce. An egg pool was set up and facilities built to store vegetables. Mismanagement and misfortune struck serious financial blows at these efforts.

The manager of the egg pool, who was appointed by the settlers, knew nothing of business methods and during a visit to St. John's he lost money which he had collected from purchasers of eggs. The net result of the venture was that the sum of \$548.00 is still outstanding on the books of the society (FOC/NA/149/1943)

During the Fall of 1940 the potato market collapsed. The Board of Directors purchased some 500 barrels of potatoes from settlers and themselves at \$2.00 per barrel plus 10 cents per barrel for delivery notwithstanding the fact that the market values of potatoes was \$1.50 per barrel. The potatoes were not properly stored and at least fifty per cent were lost (FOC/NA/149/1943)

As was mentioned earlier, by 1945 the two schools were very largely controlled by the churches, and the curriculum oriented toward academic subjects.⁷ Though each school was attended by a denominationally heterogeneous mixture of students, No. 3 school was placed under a Church of England school board and No. 1 school under a United Church board. Religious activities and social activities centred around the two schools. The first religious edifice was built by the Church of England congregation around 1949 near No. 3 school. The second, a United Church, was opened in 1964. The Roman Catholics are still without a building at Markland, but avail of a church at nearby Whitbourne.

The Argentia Naval Base

When under the self-help inducements of the three-year plan some progress appears to have been made toward development of an agricultural economy, the construction of an American Naval Base about 40 miles distant by road appears to have effectively ended any chance for long-term farming success. Salaried job opportunities offered more than a suitable alternative to the land settlers whose

immediately past experience in farming had been anything but encouraging. Far from being disappointed at the new turn of events, the government appears to have been quite pleased. For the first time since 1934, a means of ending public spending offered itself.

As the settlement is near the American Naval Base at Argentia, most of the settlers have been employed there at some time or other during the year. The money thus earned has helped to strengthen the general economic position of the settlement and has provided much needed capital
(FOC/NA/81/1941)

Very little individual capital was invested in the land, and most of that previously invested by government went to nought. Fields were abandoned to the wild, fences fell and livestock were killed off. One informant related that in 1941 he killed off 140 hens that he was keeping to supply eggs for the cottage hospital and the co-operative egg-pool. His wife was unable (or unwilling) to manage the crops while he was away, so he had to abandon farming completely. In Markland the pattern of this example appears to have been more general than exceptional.

B. Population Structure and Landscape Development, 1945-1969

The Present Population Structure

The total population of 300 in 1969 was about one-half that of the land settler population resettled there in 1934-5, and derives mainly from the original stock. Table

Table 4.12

Population, Land Occupancy, Service and Agricultural Changes
in Markland, 1945-1969

Settlement Variable	1945	1969	Percentage difference + or -
1. Population	395	300	- 24
2. No. of dwellings occupied	70	60	- 14
3. No. of holdings occupied	100	82	- 12
4. Acreage under local tenure	2,533	1,308	- 52
5. No. of services 1956			
Economic (stores, garages, etc.)	5	4	
Political (post office, hospital, etc.)	5	3	
Social (Churches, schools)	3	2	
Total	<u>13</u>	<u>9</u>	- 32
6. Farm Production in			
Bushels of Potatoes	1,788	720	- 59
No. of Horses	12	10	- 17
No. of cattle	6	2	- 66
No. of poultry	101	19	- 81
Tons of Hay	95	24	- 75

Sources: Newfoundland Census, 1945; Newfoundland Year Book and Business Directory 1956 and Field Enquiry 1969.

4.12 shows that the number of occupied dwellings (60) in 1969 was exactly one-half the number constructed by the Board of Trustees in 1934-5, and 10 dwellings (14 per cent) less than the number inhabited in 1945. In terms of their kinship to first settlers, heads of household units presently occupied may be classified as follows - 16 householders (27 per cent) are original land settlers; 30 householders (50 per cent), sons of settlers; 9 householders (15 per cent), other kin related and 5 householders (8 per cent), unrelated persons who have bought property in Markland on their own initiative.

An examination of the age-sex structure of the population in Table 4.13 shows that a large proportion of the population (about 50 per cent) is distributed over age groups between 0 and 14. Though the age-groups are not all evenly balanced for the sexes, the numbers are probably too few to draw any significant conclusions on recent patterns of population change, based on this data alone. Generally speaking, the present population is predominantly infantile and juvenile, with the remainder spread fairly evenly among age-groups and between males and females from 15 to 74. The decline in population appears to have been caused mainly by migration of young males and females in the school leaving age group 15-19, a feature that is not at all uncommon in rural Newfoundland and indeed in rural areas in many parts of the world.

Table 4.13

Age-Sex Structure of Markland Population, June 1969

<u>Age group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Percentage</u>
0-4	26	18	44	55
5-9	30	19	49	
10-14	24	29	53	
15-19	6	13	19	
20-24	10	10	20	
25-29	9	7	16	37
30-34	14	9	23	
35-39	4	7	11	
40-44	9	5	14	
45-49	4	6	10	
50-54	4	3	7	8
55-59	3	5	8	
60-64	6	3	9	
65-69	4	5	9	
70-74	<u>5</u>	<u>3</u>	<u>8</u>	
Total	<u>158</u>	<u>142</u>	<u>300</u>	

Source: Field Enquiry, 1969

A comparison of data on the religious structure of the present population contained in Table 4.14 with data in Table 4.8 for 1945 shows that in absolute number of adherents, all denominations have shown decline. In relative terms Anglicans form 42 per cent of the population, 38 per cent belong to the United Church, and 18 per cent are Roman Catholics. Overall, the percentage difference in the population by denomination varies only slightly from that in 1945 (Table 4.14).

According to records of the Department of Education in St. John's, from 1945 to 1961, 70 Markland students wrote public examinations in one or more of the final three years of school (Grades IX, X and XI). A field survey follow-up on these pupils shows that only six (four females and two males) settled in Markland. Three are presently housewives; one male and one female are physically disabled and the remaining male is a heavy equipment operator. It is evident that the main group of those settling at Markland after 1945 come from among those land settler sons who have failed to attain schooling to Grade IX and, more selectively, from those who have been unable to secure permanent employment elsewhere, because of lack of training and education, disabilities, or other personal circumstance. Some additional data collected on the school attainment and place of residence of students leaving school during the period 1964-1969 is shown in Table 4.15.

Table 4.14

Religious Structure of Markland Population, June 1969

Denomination	No. of Persons	Percentage	Percentage Change from 1945
Roman Catholic	56	18	- 1
Church of England (Anglican)	127	42	+ 5
United Church	112	38	- 2
Salvation Army	5	2	+ 1
Pentecostal	-	0	- 3
	—	—	—
Total	300	100	0
	—	—	—

Table 4.15

Level of Education and Place of Residence of Markland
Students leaving School 1964-1969

Last Grade Taken	Number of Students			At Markland			Elsewhere Nfld.			Canadian Mainland		
	Male	Female	Total	M	F	T	M	F	T	M	F	T
XI	2	3	5	-	-	-	2	3	5	-	-	-
X	2	-	2	-	-	-	2	-	2	-	-	-
IX	1	6	7	-	4	4	1	2	3	-	-	-
VIII	2	1	3	1	1	2	-	-	-	1	-	1
VII or less	4	1	5	4	-	4	-	-	-	-	1	1
Total	<u>11</u>	<u>11</u>	<u>22</u>		<u>10</u>			<u>10</u>			<u>2</u>	

Out of 22 school leavers only five had completed Grade XI, and only seven Grade X, yet all of these had left Markland. Those abiding in Markland came from two main groups - males having attained Grade VIII or less and females with Grade IX or less. These two groups, particularly the males, tend to insure the continuance of settlement for unless they can find permanent employment or acquire additional training they are likely to remain at home until after they have married and settled down, travelling to casual labouring jobs wherever they can be had. Already one of the males included in Table 4.15, having attained Grade VII, has married, built a small home, and acquired the responsibility of raising three children.

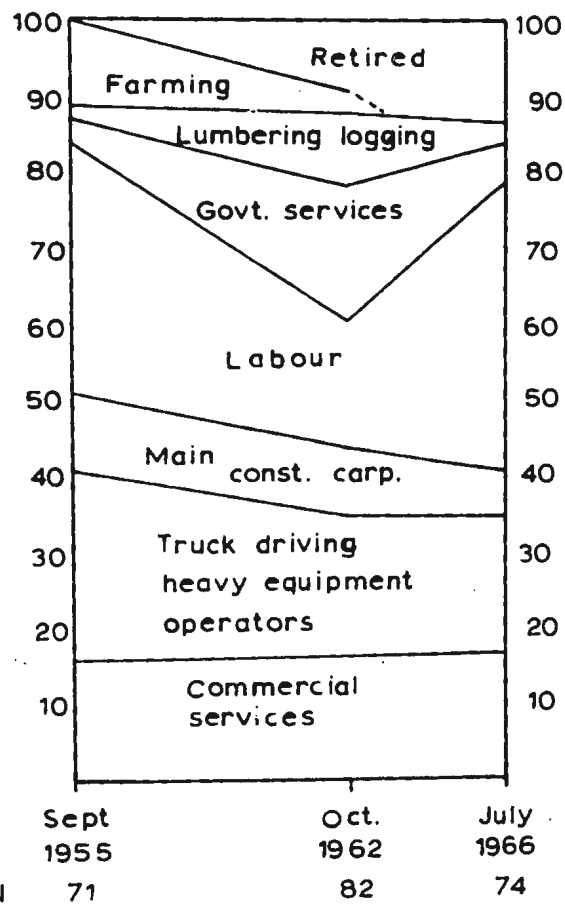
The decline in the population of Markland is largely attributable to the outmigration of the better educated youth, thus leaving within the settlement a population that is little better equipped to deal with their social and economic problems than the preceding generation. As long as the settlement has an element drawn from school dropouts it is likely to survive. The potential for this in the immediate future is in the children presently attending school. In Newfoundland, depending upon the date of birth, some children start school at age 5 years, while most children begin at 6 years. Allowing a two-year spread for each grade level, and using the grade level as the index

of achievement in school, in June 1969 it was found that 32 Markland students (29 per cent) out of 111 attending school varied from one to three years below the age-grade norm, and that 17 of these were in grades VII to IX. The probability that these will leave without completing school is very high. From these too are likely to come the future Markland settlers perpetuating past patterns of outmigration and replacement in the population.

It has already been seen that the Markland labour force in 1945 was mainly engaged in wage employment outside the settlement. This trend appears to be strengthened to the present. Figure 4.7 shows the percentage of the labour force by occupation calculated from electoral lists for 1955, 1962 and 1966. Labour work, operating trucks and heavy equipment and employment in commercial and government services in these three years engaged from 70 to 80 per cent of the labour force. In 1955 10 per cent of the males over 21 years classified themselves as farmers, in 1962 farmers represented 2 per cent of the labour force, in 1966 there were no farmers. In 1969 there was one farmer - the son of a farmer from near St. John's who had married a Markland girl and acquired some land there.

The cottage hospital, a few small grocery/confectionery stores and a heavy equipment repair shop operated by the Agricultural Division of Government provide the main local employment opportunities within the settlement. The total

Percentage of Adult Male Labour Force by occupation in Markland 1955-1966



SOURCE. ELECTORAL REGISTERS, 1955, 1962, 1966

Table 4.16

Employment Status of Markland Labour Force, June 1969

		No.	Per Cent
I. Work Status			
Total employable		125	100
(a) employed		43	34
in wage work	39	31	
self employed	4	3	
(b) unemployed		34	27
able-bodied	30	24	
disabled	4	3	
(c) housewives/widows		48	39
(d) pensioners		17	
II. Place of Employment		No.	Per Cent of employed
a. at home		10	24
b. elsewhere		33	76
i. commuting			
1-25 miles	14	32	
26-50 miles	4	10	
51-75 miles	7	16	
over 75 miles	8	18	
ii. commuting - daily			
2 - 7 days	21	48	
over 7 days	3	7	
	9	21	

number self-employed and employed for wages locally in June 1969 was 10 persons, or 8 per cent of the total number of employable residents, that is, persons over school-leaving age and having left school but less than 65 years, the normal age of retirement (See Table 4.16).

Table 4.16 shows that for one point in time, June 1969, the number and percentage of unemployed persons was only slightly less than of the active work force, and this appears to be a situation that prevails frequently, though varying throughout the year and from year to year. Practically all of the unemployed formed an inactive commuting element. Out of 43 who were actively engaged at the time of the field survey, 33 (76 per cent) were working in places varying in distance from 1 mile to over 75 miles from the settlement, i.e. from Whitbourne to Churchill Falls in Labrador. In the main commuters worked less than 25 miles away from Markland returning home daily. Some commuted as high as 60 miles, to St. John's, daily. In terms of patterns of work and employment, Markland is today a dormitory community for unemployed families as well as for a labour force that engages in work, primarily on a casual or seasonal basis, away from home. A few elderly find Markland favorable enough to live out their retirement and, at least, two former land settlers have returned after reaching retirement age, after having worked and raised their families away.

Unemployment, the chief problem of many Markland residents today, is the same problem that plagued the earliest settlers established there in 1934-5 by the Commission of Government. Like their predecessors, most of the present generation find little attraction in attempting to work the land either as a part-time or as a full-time occupation. One young married male who was unemployed at the time of the interview discussed farming and land use thus:

Settler: "I've got plenty of land here. Why doesn't the government come out and plant some crops so I can get some work?"

Interviewer: "Couldn't you plant crops yourself?"

Settler: "Yes, but I might get a job at Churchill Falls next week and then it would be a waste."

The Present Landscape

The decline in number of persons, occupied dwellings and land holdings has had the effect of modifying the landscape and pattern of settlement. Today Markland is a settlement spread along a single road way six miles in length. All holdings and dwellings in Nuggetville have been abandoned. The former administrative communities - No. 2 and No. 6 - are presently occupied by 4 and 3 householders respectively. The remaining 53 household units are divided between Community No. 1 with 21 units and No. 3 with 32 units. In that Communities No. 1 and No. 3 are each on the main road, and had until 1968 each a

school, there appears to have been a greater spatial preference among families to stay or locate where the distance from both the road and a school were minimal.

Table 4.12 shows that compared with ~~2533~~ acres of land occupied in 1945, there were only 1308 acres owned and occupied in 1969 by Markland residents. The difference represents land held under private grants by persons who have since died or moved elsewhere. While the resident occupance by local tenure has declined by 52 per cent in acreage, the total number of holdings has declined only by 12 per cent. The main reason for the relative difference in decline is due to road frontage subdivision of holdings mainly in communities No. 1 and No. 3 for sale to newer settlers or for distribution among their sons and other heirs who have married and required land for building lots. Though the process of sub-dividing only became legal in 1962, most settlers had been permitting sons and other relatives to build on the paternal homestead for many years previously.

The role of agriculture has never assumed any major importance in the economy of Markland. Land cleared under the Land Settlement scheme has mostly reverted to the wild and grown over in brush and woodland. Government records show only 6 acres of new land have been cleared there since 1942.⁸ Data on selected items of farm production collected in the field survey, compared with

those recorded in the 1945 census, show a decline of 59 per cent in potatoes grown to 81 per cent reduction in the number of poultry kept (Table 4.12). The keeping of horses for hauling firewood is still as important relatively as it was in 1945, although only about 16 per cent of the householders keep a unit.

The Service Function of Markland 1969

While the population has declined and the settlement contracted, the nearby settlement of Whitbourne one mile to the north has continued to grow and expand, from a population in 1935 of 607 to a population in 1966 of 1114. Correspondingly, services of governmental, religious and commercial agencies have tended to increase and expand in Whitbourne while similar functions have either declined or ceased to exist in Markland. Current government policy in centralizing schools and in moving children by bus from smaller to larger centres has resulted in the closure of Markland schools - a process that began by first moving high school students to Whitbourne in 1961 and was completed with the transfer of all school children to Whitbourne in 1968. Since 1956 the total number of economic, political and social services within Markland has declined by 32 per cent (Table 4.12) and these have been replaced by services available in Whitbourne and St. John's and made more accessible through road improvements and the acquisition of

personal mobility. Most householders possess a car or pick-up. The gradual loss of one service function after another continues to make Markland more and more just a settlement where a number of families make a home.

Federal government policy may soon result in the closing of the Post Office, substituting in its place a system of rural delivery and mail pick-up. In the budget speech of the Newfoundland Provincial Government in 1969 it was announced that the Markland cottage hospital was to be closed. This action, however, has been halted temporarily at least. Local employment in services which is even now small will likely decline during the immediate future.

CHAPTER V

The Minor Land Settlements

The present section deals with the process of establishing the basis of settlement in the four schemes that followed the founding of Markland. These four settlements, Haricot, Lourdes, Midland and Brown's Arm were formerly referred to as the Minor Land Settlements, probably because they each contained less than one-quarter the number of families at Markland. In the following discussion Minor Land Settlements is used as a collective term to refer to the four mentioned land settlement projects.

In considering the Minor Land Settlements, two problems arise in using the Newfoundland Censuses for 1935 and 1945 additional to those already discussed in the previous chapter. Firstly, the 1935 census was taken prior to their establishment.¹ Secondly, the 1945 census enumeration units, taken by settlement, are not comparable areally with the land settlement sectors of those settlements - in this consideration Lourdes, Haricot and Brown's Arm, which were located close by and accepted the nomenclature of earlier settlements - but rather relate to the land settlement and older settlement parts as a single

enumeration unit. For these reasons it was necessary to rely more upon intensive field work and archival sources in focussing attention on land settlers and settlements.

A. Population Structure and Settlement Development to 1945

Patterns of Settlement by Origin and Background

The series of maps shown in Figures 5.1, 5.2, 5.3, and 5.4 indicate the numbers of families and the places of origin in relation to the Minor Land Settlements to which settlers migrated in the years 1934-1936. Figure 5.5 indicates the general pattern of settlement following the establishment of Minor Land Settlement populations. The Lourdes land settlers originated from the three south coast settlements of Harbour Breton, Miller's Passage and Sagona Island (Fig. 5.1). The Haricot families came from thirteen separate settlements around the Avalon Peninsula (Fig. 5.2). Families resettled at Midland and Brown's Arm 1936 were drawn from settlements spread over a larger area. Figures 5.3 and 5.4 show that the patterns of migration to these two settlements by place of origin were similar. Especially noteworthy is the fact that land settlers selected in Placentia Bay for both Brown's Arm and Midland came from the four settlements of Lamaline, Burin, Red Island and Argentia. Most of these settlers had apparently applied for entry into Markland and some at least, according to

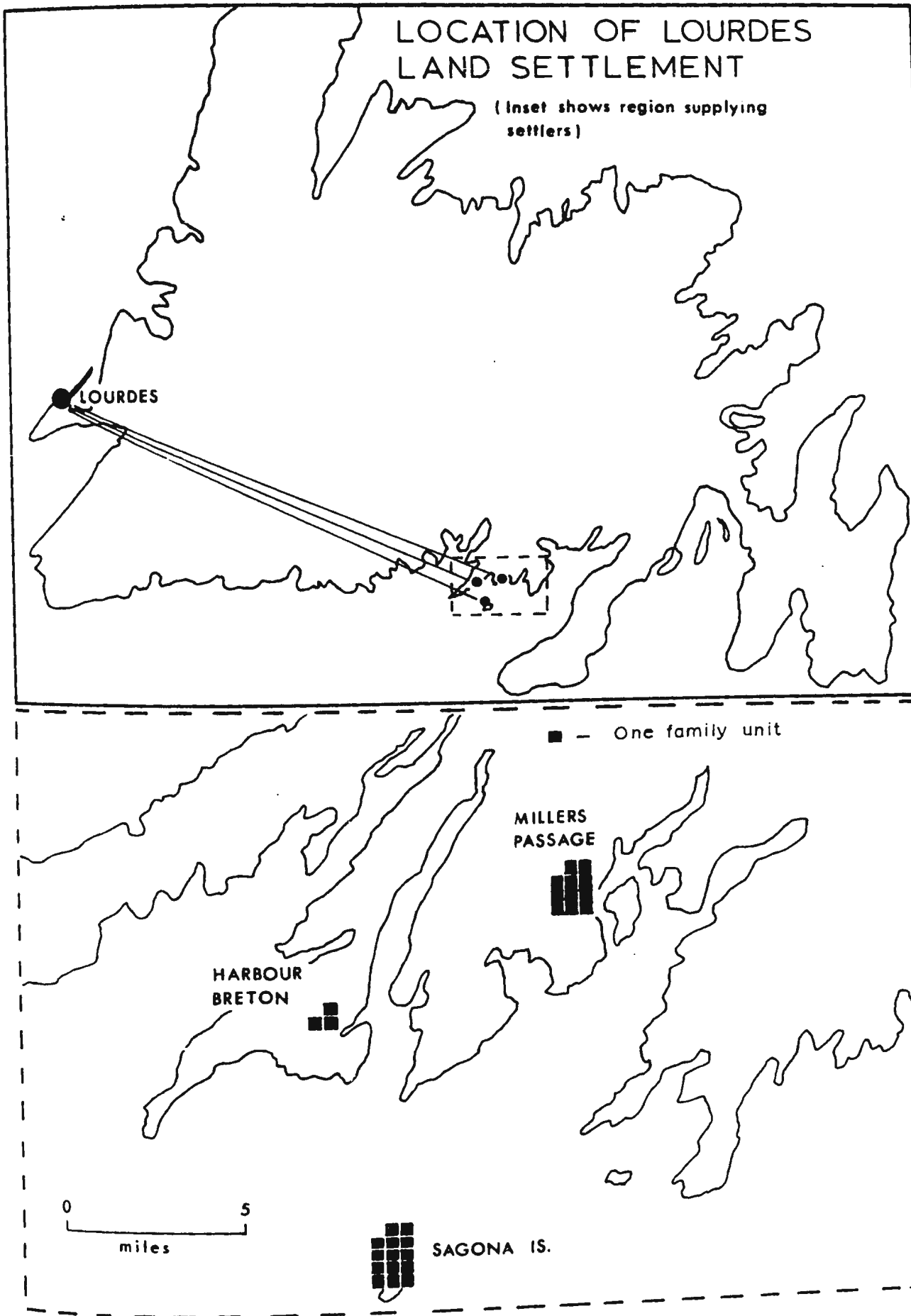


Figure 5.2

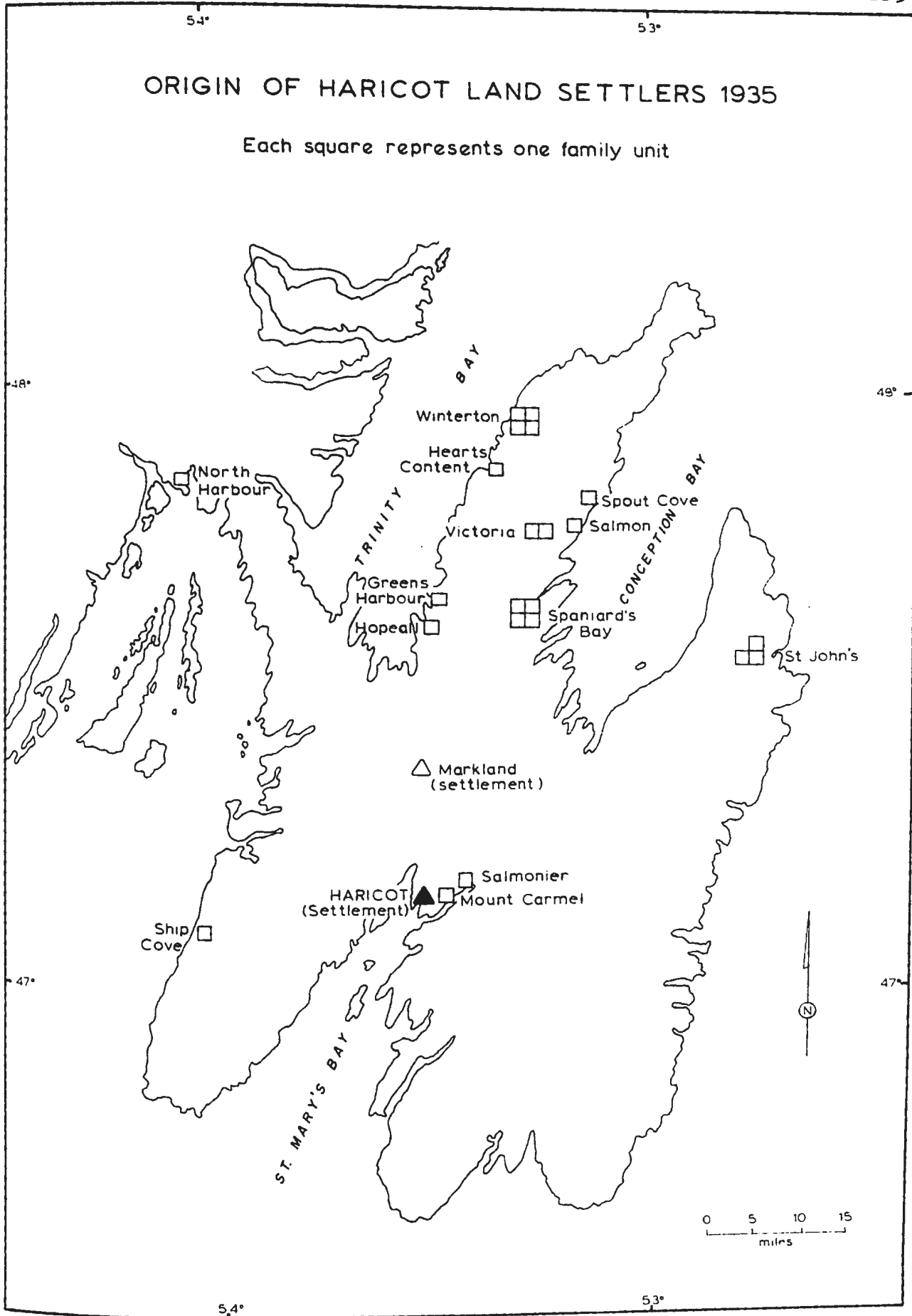
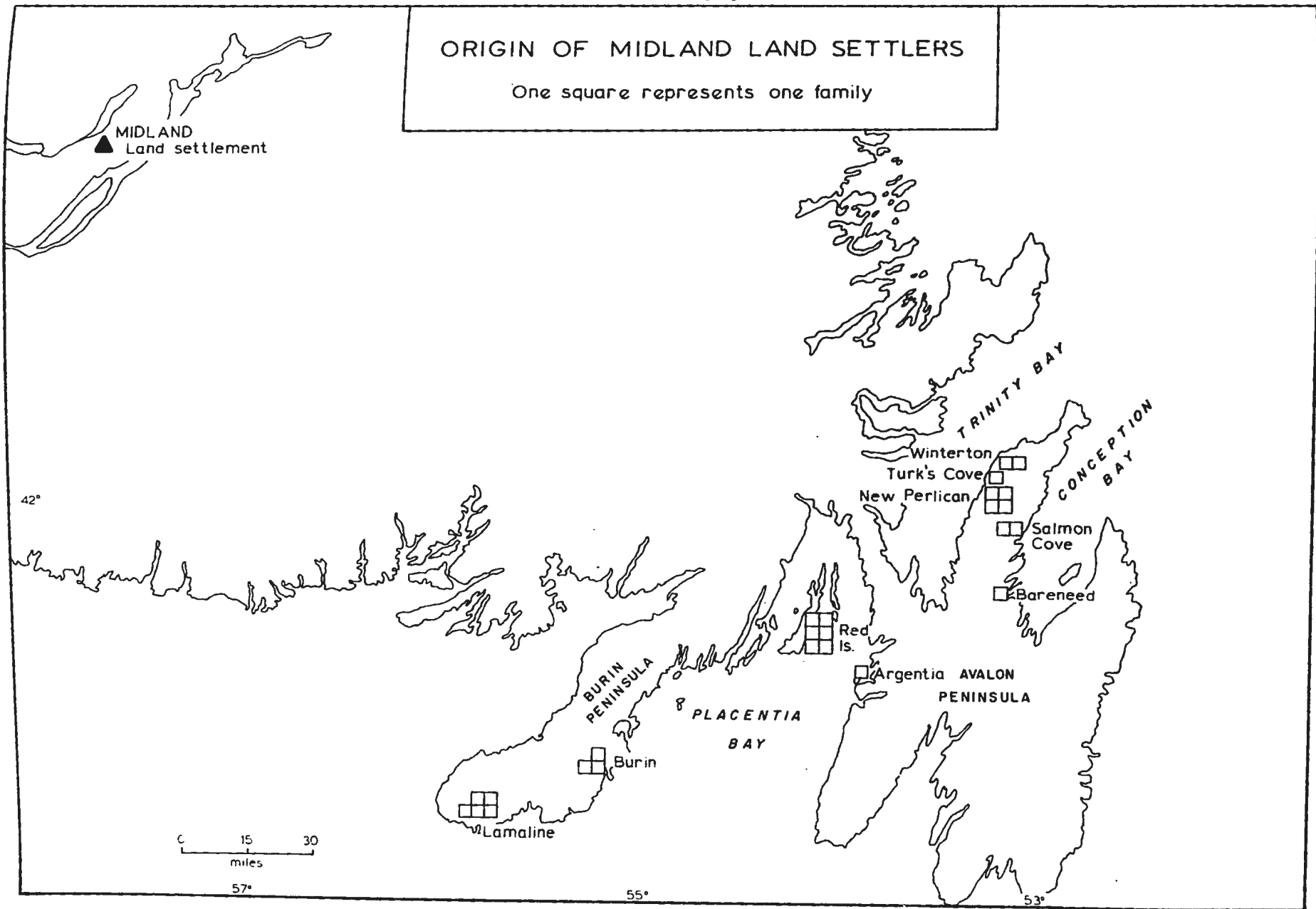
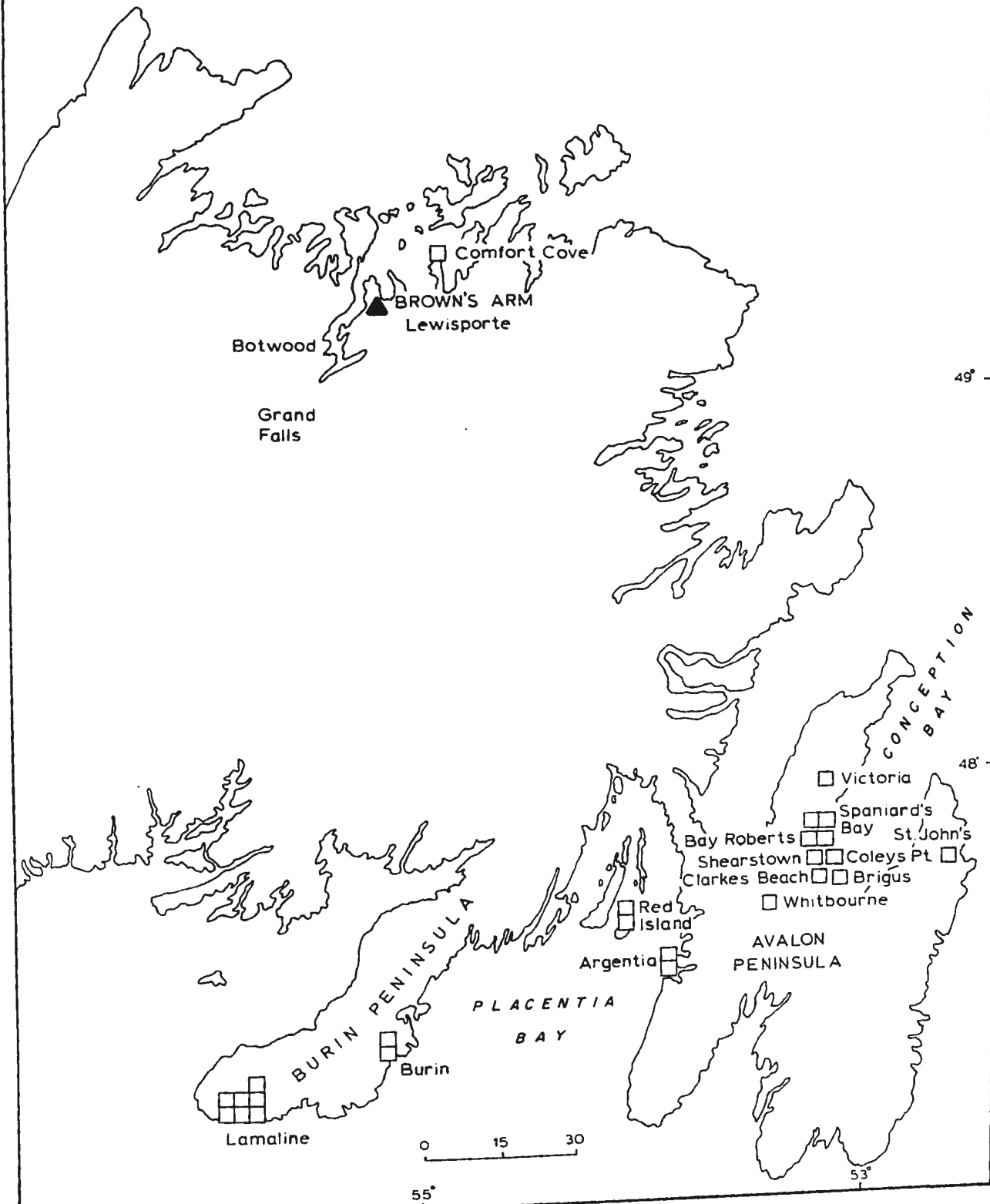


Figure 5.3



ORIGIN OF BROWN'S ARM LAND SETTLERS 1936

One square represents one family unit

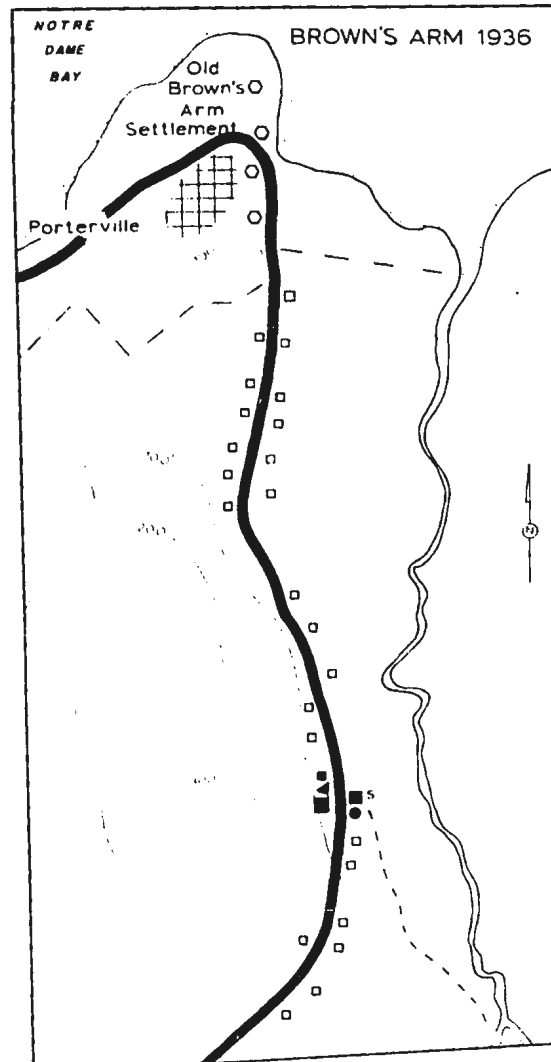
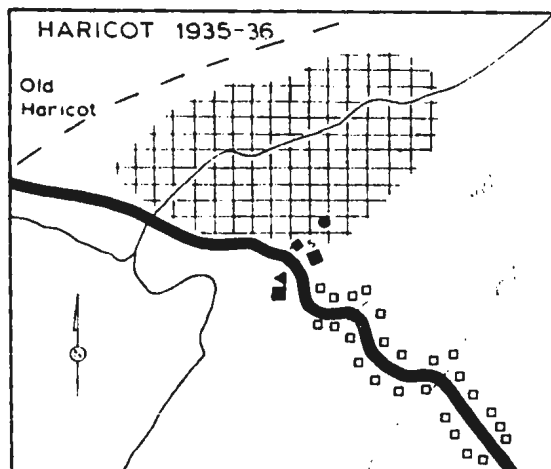
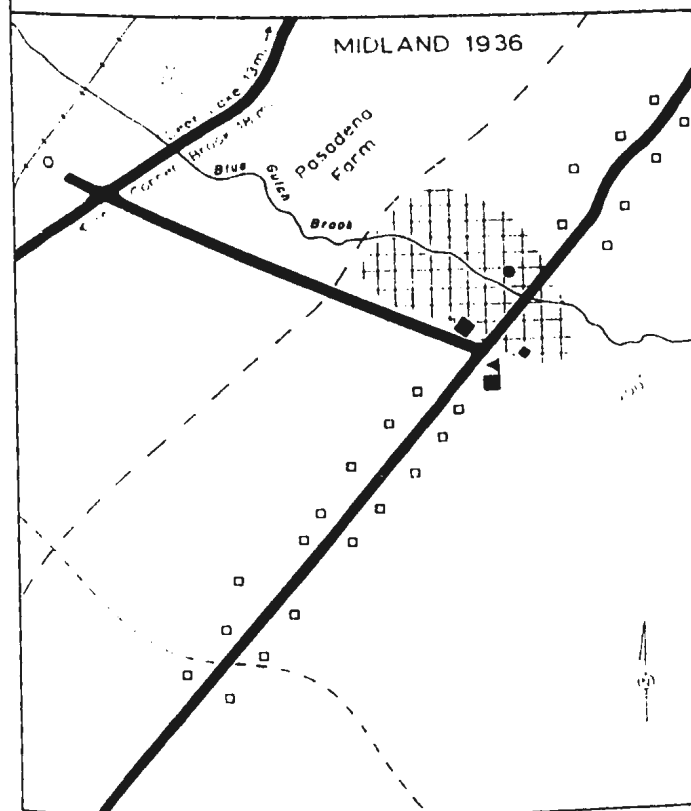
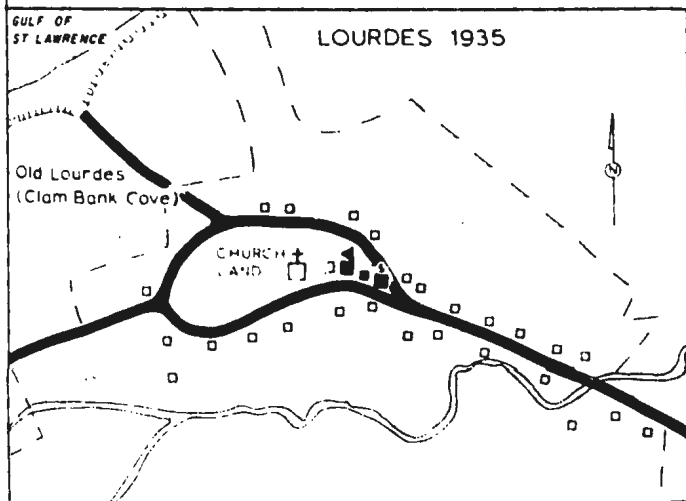


MINOR LAND SETTLEMENT PLANS 1935-36

0 500 1000
feet

- Settler cottage
- Staff house
- School
- Community barn
- Supply store
- Earlier settlement houses
- ~ Stream
- Seashore
- ▤ Community farm area
- - - Limits land settlement
- Gravel road
- - - Woods road

Contour interval 100 feet



informants in both Midland and Brown's Arm, discovered after leaving home that they were destined by the central authority to become land settlers elsewhere, and later that they were going to different places from their kith and kin.

Table 5.1 indicates some variations in the population structure of families entering the Minor Land Settlements. Though the data are not complete, the reconstructive evidence is sufficient to indicate that family size and settler age, in all settlements, showed considerable variations. Available evidence indicates that the families at Lourdes were largest, averaging 6.4 persons, and that each settler had at least two dependents. At Midland and Haricot some families consisted of childless couples while other families had as many as 9 and 14 members.

Table 5.2 shows that Haricot, Midland and Brown's Arm exhibited features similar to Markland in the religious denominational structure of the land settlers. Among the 25 families resettled at Haricot, a settlement situated in a district that was almost exclusively Roman Catholic, we find settlers of five different religious denominations, with 22 families (88 per cent) belonging to Protestant Churches. Similarly at Brown's Arm, in the predominantly Protestant district of Notre Dame Bay, we find that 8 settler families (32 per cent) were adherents of Roman Catholicism. Lourdes settlement alone constituted a population structured unidenominationally, and one that

Table 5.1

Selected Population Characteristics of Original Families
in Minor Land Settlements, 1935-36

	Lourdes	Haricot	Midland	Brown's Arm
1. Number of Families	28	25	25	25
2. Total populations, approx.	180	116	145	155
3. Mean family size	6.4	4.6	5.8	6.2
4. Smallest family unit	3	2	2	5
5. Largest family unit	11	14	9	8
6. Mean age settler	35.2	31.8	39.4	33.7
7. Youngest settler	21	23	23	27
8. Oldest settler	49	53	54	40

Source: Field Enquiry 1969.

Data included in items numbered 2 to 8 are not complete for all settlements. The following indicate where data are incomplete and the figures in parentheses show the number of families on which calculations are based:

population, and family size - Lourdes (15), Brown's Arm (5)
settler age - Lourdes (15), Midland (10), Brown's Arm (5)

Table 5.2

Religious Structure of Original Families in
Minor Land Settlements

Denomination	Lourdes	Number of Families		Brown's Arm
		Haricot	Midland	
Church of England	-	10	10	12
Roman Catholic	28	3	7	8
United Church	-	8	8	3
Salvation Army	-	2	-	1
Pentecostal	-	2	-	1
No. of Families	28	25	25	25

Source: Field Enquiry 1969

accorded with the religious structure of previously established populations in the Port au Port area.

Table 5.3 shows the distribution of original settlers in the Minor Land Settlements by occupational background. On the whole the land settlement scheme in relation to these settlements appears to be largely oriented toward the rehabilitation of fishing families, particularly with reference to Lourdes and Midland. The land settlers of Haricot, as in Markland, not only combined families of urban and rural environments but also families from both industrial and primary occupations. A large proportion of the unidentified occupations for initial settlers at Brown's Arm and Midland is due to the fact that many families left there within a few years of their arrival and although informants could recall their name and place of origin quite readily, ages, numbers of children and previous occupation were far more difficult to establish. It was not difficult, however, to determine that settlers leaving Midland before 1945 included 7 families out of the 10 that had earlier arrived from places in Trinity and Conception Bay (Fig. 5.3) and that outmigrating families from Brown's Arm in the same period included the total of 11 families that had come from Trinity Bay, Conception Bay and St. John's (Fig. 5.4). Thus one may reasonably suspect that these settlers bore occupational trademarks similar to

Table 5.3

Occupational Background of Land Settlers in Minor Land Settlements

Occupation	Number and Percentage							
	Lourdes		Haricot		Midland		Brown's Arm	
	No	%	No	%	No	%	No	%
Fisherman	26	93	10	40	16	64	13	52
Carpenter			2	8				
Miner			5	20				
Seaman	2	7						
Labourer			3	12	1	4		
Retail Clerk			1	4				
Blacksmith			2	8				
Lumberman							1	4
Unidentified			2	8	8	32	11	44
Total	28	100	25	100	25	100	25	100

Source: Field Enquiry, 1969.

settlers of Haricot and Markland. Figure 2.2 shows, for example, that settlers migrating to the various land settlements came in many instances from the same regions.

Outmigration and Replacement

Population changes within the Minor Land Settlements in the first decade were greatly influenced by two processes - outmigration and immigration. By 1945 only 57 original families (55 per cent) were still in residence. However, some 33 dwellings were reoccupied by replacement families. Table 4.4 shows that the numbers of outgoing and incoming families were largest at Brown's Arm which by 1945 had retained only 12 per cent of the initial settlers but yet had acquired replacements for all but two of those families leaving. Replacement at Midland equalled outmigration in terms of family numbers. Haricot showed the greatest net loss of settlers; Lourdes, the highest percentage of original family retention, having lost but a single family from the initial resettlement.²

Generally speaking, the families leaving Haricot, Brown's Arm and Midland, had for the most part originated in places on the Avalon Peninsula, more particularly in the larger and more urbanized communities. Those families abiding tended to have originated from among fishing families. There were, however, other features of outmigrations which affected the cultural composition of the populations

Table 5.4

Outmigration of Original Settlers and Replacement by New Settlers
in the Minor Land Settlements to 1945

	Number of Families		Original Settlers left		Total Number
	Departing	Replacing	No.	Per Cent	of Families
Lourdes	1		27	97	27
Haricot	16	6	9	36	15
Midland	7	7	18	72	25
Brown's Arm	<u>22</u>	<u>20</u>	<u>3</u>	<u>12</u>	<u>23</u>
Total	46	33	57	55	90

Source: Field Enquiry, 1969.

of Haricot, Midland and Brown's Arm. By 1945 there were no Roman Catholic families left at Brown's Arm, and fewer families of the Church of England and United Church. Replacement families and a limited amount of conversion had produced in Brown's Arm by 1945 a strictly Protestant settlement dominated by Pentecostal families (Table 5.5). At the same time outmigration of Protestant families and replacement by Catholic families reversed the denominational dominance of Haricot and Midland. It is interesting that one of the Roman Catholic settlers at Brown's Arm became a replacement settler in Midland, where six families from his former home in Red Island in Placentia Bay had resettled.

Table 5.5

Percentage Change in the Religious Structure
of Selected Minor Land Settlements to 1945

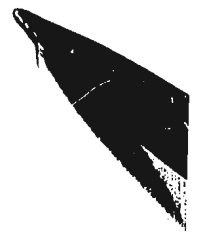
Denomination	Haricot Percentage	Midland Change (+ or -)	Brown's Arm
Church of England	-14	-10	-13
United Church	- 6	-12	- 8
Roman Catholic	+22	+22	-32
Salvation Army	- 1	-	- 4
Pentecostal	- 1	-	+57

Whereas initial resettlement had involved relatively long distance migrations of settler families, the process of replacement increased local district participation. As

families left Brown's Arm for their former homes on the Avalon, the land manager accepted families from neighbouring settlements in Notre Dame Bay (Chafe, 1969, pers. comm.). A second replacement process involved the migration of additional families from settlements that had supplied the initial land settlers. For instance, vacated land settler cottages and land holdings in Midland were mostly taken by new arrivals from Lamaline and Red Island. A third replacement process was that of newly married land settler sons and daughters acquiring vacated dwellings.

Housing the Settlers

The construction of dwelling houses at Lourdes followed a different pattern from the other three Minor Land Settlements where as in Markland contractors and materials were brought from outside for the purpose. In Lourdes the first ten houses were built by settlers with lumber cut and sawn at Three Rock Cove in the winter of 1935. These houses, five of which were two-storey, were designed apparently after the stylings of houses which settlers had vacated on the south coast and were built near the only two pre-existing buildings in the area, namely the Roman Catholic Church and Parish Hall. The latter served first as a bunk house for the men and after the families arrived functioned as a school house. Following the



arrival of the first land manager, the remaining dwellings were constructed along the plans of cottages built in Markland (Fig. 5.6). The utilization of settler labour and local materials in Lourdes greatly reduced the cost of dwellings compared to the other land settlements. Additionally land settlers at Lourdes arrived in Clam Bank Cove in a railway coastal boat carrying all of their household possessions as well as some cattle, sheep and hens. By contrast Midland, Brown's Arm and Haricot settlers arrived with very little household furnishings and these had to be supplied at government expense. The following indicate the difference in cost of housing Lourdes settlers as compared with Haricot, Midland and Brown's Arm settlers:

Cost of housing per family

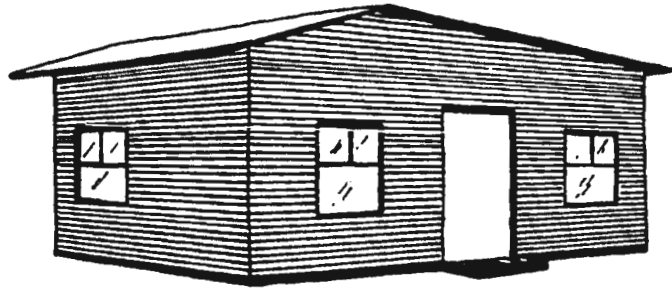
Lourdes	\$ 115	
Haricot	720	
Midland	700	
Brown's Arm	880	(FOC/NA, <u>passim</u>)

Sheltering the families formed one aspect of establishing settlement. Another was bestowing the rights and conditions of house ownership. In this regard government action was equally as tardy as in the passing of legislation respecting land tenure. Indeed both processes were finally decided upon in 1944 and one was linked to the other. Until that time families were tenants of the state, occupying their houses and land by right of government

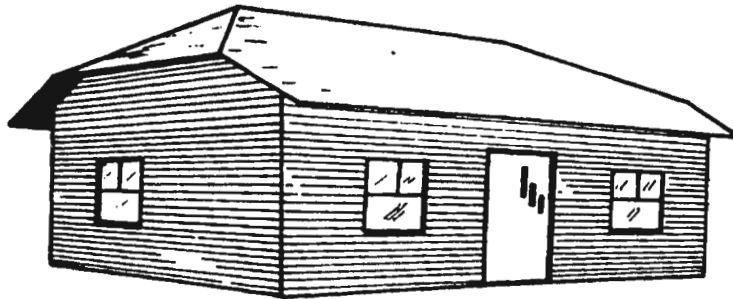
ORIGINAL LAND SETTLEMENT COTTAGES

Landscape features of :

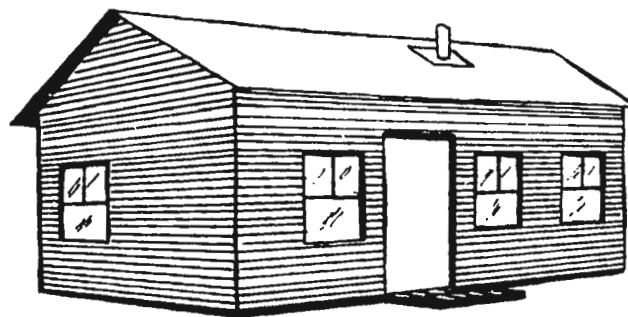
Markland
Haricot
Lourdes
Midland
Brown's Arm



Lourdes
Sandringham



Sandringham
Point au Mal

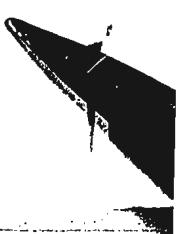


permission and a promise of ownership.

Apart from Lourdes, a large proportion of the houses in the other land settlements had been occupied by several families before their 1944 tenants. Though some families had made improvements through general upkeep and had enlarged or added rooms, the majority showed reluctance to improve houses which they occupied but to which they lacked the right of ownership. Besides passing the Land Development Act, the government set a value of \$50 on land settlement houses and established that land grants be issued to families, which included the rights of ownership to dwellings, on receipt of payment.³ (See Appendix B.2). Although no records could be found to verify whether or not all settlers paid for their dwellings, according to comments offered by various informants, some did but a large proportion did not. It seems that grants to land and home ownerships were simply issued en bloc by settlement to all settlers probably as a more expedient measure than attempting to collect or asking the recusants to move out.

Settlement Patterns and Land Ownership

The establishment of settlement in the Minor Land Settlements predated official land surveys. House sites were determined by the first land managers. The settlement plans that emerged were essentially those of road villages - homesteads on both sides of a single road (Fig. 5.5).

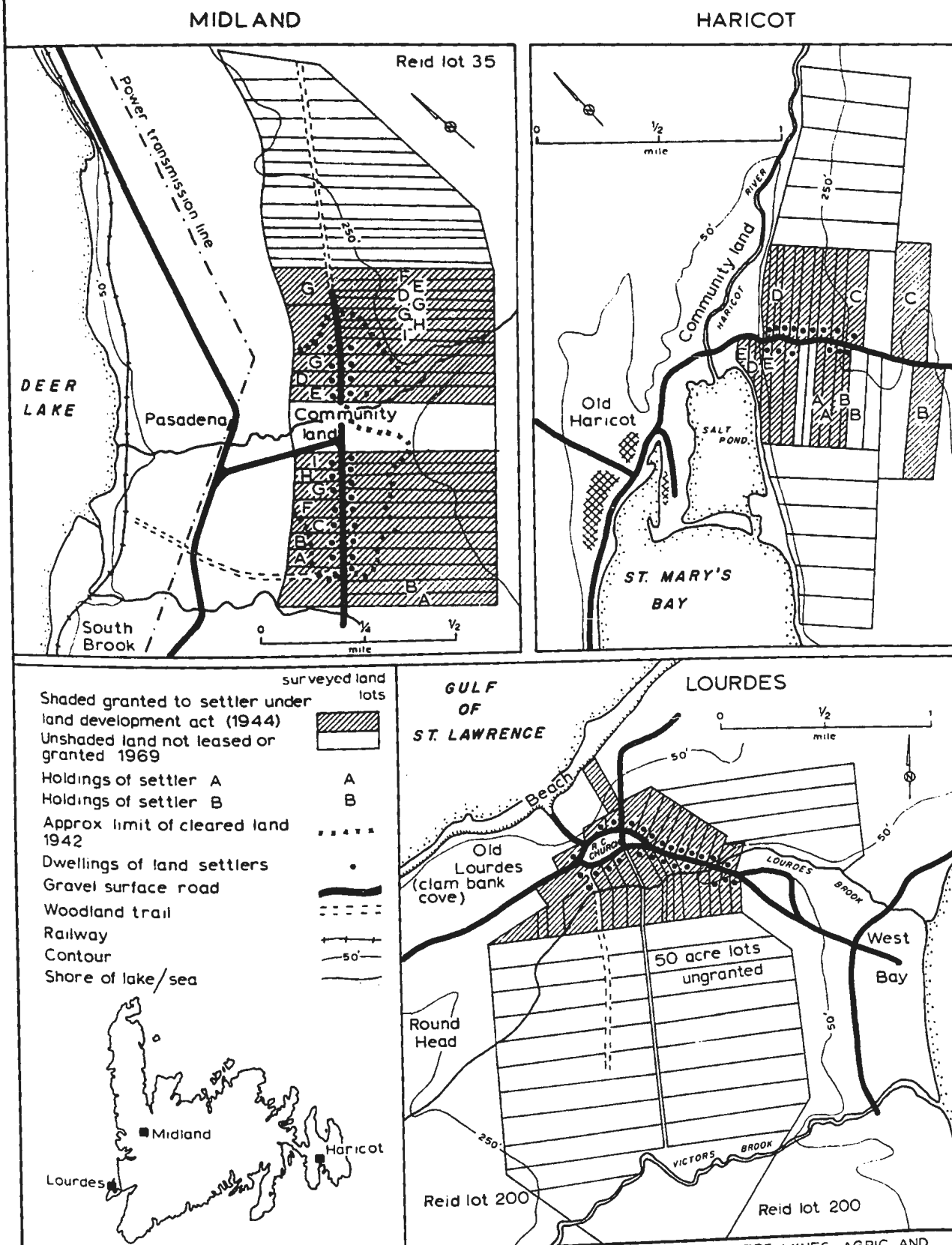


Lourdes land settlement showed the only variation. There the main group of dwellings and land holdings were sited around an almond shaped common with the church, the school, the store and settlement management structures.

In Haricot and Midland community farming areas were laid aside and those were used to accommodate the structure serving village functions (Fig. 5.5). During the first year of occupance Brown's Arm settlers planted a small clearing on land owned by a previous Brown's Arm settler. This land, shown in Figure 5.5 was outside the designated land settlement area and used only the first year. On his own initiative the land manager here abandoned the concept of communal farming and attempted to establish individual holdings (Chafe, 1969, pers. comm.). When a cadastral survey eventually established the pattern of ownership and the state discouraged community farming, the former communal properties were left in community pastures at both Midland and Haricot. In Lourdes community farming was not attempted at any time.

The initial pattern of occupance imposed its own mark upon subsequent attempts to survey and allot holdings during the three-year plan. House sites and individually occupied land clearances tended to limit road frontages. Generally land holdings were laid out in long narrow strips on both sides of the road. The example of Midland, shown

ORIGINAL DISTRIBUTION OF LAND HOLDINGS AND PATTERN OF LAND TENURE LOURDES, MIDLAND AND HARICOT



SOURCES: REDRAWN FROM ORIGINAL CADASTRAL SURVEY PLANS AVAILABLE FROM DEPT MINES, AGRIC AND RESOURCES, CROWN LAND DIVISION, ST JOHN'S

in Figure 5.7, however, demonstrates that this was not always practical. Settlers on the lake side of the central road had the length of their holdings restricted by the road on one side and privately held property on the other. The spacing of houses and land clearances determined the width of holdings. Thus whereas settlers on the land side of the road were given single homestead units, those on the lake side were given two lots in an apparent effort to arrive at an equitable distribution by acreage. Repeated letters, e.g. A, B, in Figure 5.7 indicate the holdings of settler A, settler B, etc. Aside from the existing pattern of occupancy, the uniformity of terrain and soil conditions permitted a greater regularity in the eventual pattern of land ownership at Midland than in any of the other land settlements. Though Lourdes settlement represents the only settlement where there was a one-to-one relationship between numbers of occupants and land lots, there was a wide variation in size, ranging from 5 acres in the smallest unit to 25 acres on the largest lot (Table 4.10). Tenure complications plus variations in terrain and soil conditions appear to have been considered in establishing field boundaries and this resulted in the irregularly-sized holdings and the jogging pattern of the official survey lines which are shown in Lourdes (Fig. 5.7). If Lourdes land holdings in Figure 5.7 are compared with the soil map in Figure 3.3 it can be seen that the smaller holdings on

the north side of the road were subdivided from among the better drained and more fertile soils whereas the larger holdings on the south lay astride and included the poorly drained bottom lands of Lourdes Brook.

The unshaded portion of surveyed lots in Figure 5.7 show land that was surveyed during the three-year plan but as of 1969 remained unoccupied. The unoccupied holdings on the northern side of Midland represents an area designated for subsequent settlement growth and expansion. This area still remains uncleared and unimproved. The unshaded surveyed holdings at Lourdes and Haricot represent lots that were to be added to holdings of established settlers under the three-year plan - a recommendation of Gorvin that was never carried out.

Land Clearing

The technology and methods of land clearing in the Minor Land Settlements were basically the same as those employed at Markland and need not be described again in detail. However, there were some basic differences. In Midland and Brown's Arm, for instance, the tractor operators initially were the land managers. The following reports on those two settlements contain the following extracts for 1937:

Midland

The houses are disposed in line on both sides of a central road and a manager is in the process of clearing by tractor and machinery a substantial strip from end to end of the village behind the houses on each side of the road.... When the two strips have been run the whole length of the village, they will lend themselves readily to division so that each house may have the beginnings of its individual lot behind it.

(FOC/NA/130/1937b)

Brown's Arm

The manager is clearing by tractor and machinery a large strip which runs behind a number of the houses and has already divided this and put a number of sections in the hands of settlers for individual clearings. In other places individual clearings are being made....

(FOC/NA/130.1937b)

Until 1940, the second year of the three-year plan, land clearing in Lourdes was carried out entirely by hand and mostly by individual families. Hand capstans⁴ operated by groups of men were used to uproot the larger stumps. Though progress here was slow relative to the rate of land clearing achieved between 1939 and 1941 when heavy equipment was used, the cleared acreage in Lourdes at the end of 1938 was greater than at Haricot, Midland, or Brown's Arm in total acreage (Table 5.6) and only slightly less than Midland in improved acreage per family (Table 5.7).

The three-year plan had the same effect in greatly expanding the area of improved acreages in the Minor Land Settlements as it had in Markland. Self-help encouraged on an individual basis through land clearing bonuses appears to have met with reasonable success in expanding

Table 5.6

Expansion of Area in Cleared Land in
Minor Land Settlements, 1937-1941

	<u>1937</u>	Acres <u>1938</u>	<u>1939</u>	<u>1940</u>	<u>1941</u>
Haricot	25	35	80	110	150
Lourdes	35	75	75	100	190
Midland	60	60	166	200	250
Brown's Arm	40	50	80	120	200

Source: FOC/NA/1934-1948

Table 5.7

Improved Acres per Settler in Minor
Land Settlements 1938 and 1941

	<u>1938</u>	<u>1941</u>
Haricot	1.7	10.0
Lourdes	2.3	7.0
Midland	2.4	10.0
Brown's Arm	2.0	8.0

land clearances, even if some settlers were motivated more by the bonus scheme itself than by any great desire to establish themselves as farmers.

Land Use and Agricultural Production

A chief goal of the three-year plan was the development of mixed farm holdings with emphasis on the establishment of hay and pasture land. It was planned that when sufficient feeding stuffs were being produced, each

family would be awarded a livestock bonus sufficient for the purchase of a horse or an ox, a cow, a pig and twelve hens. Additional bonuses were to be added for the purchase of farm implements, the building of an approved barn, a poultry house, a fence and a root cellar, as well as for cultivating land in an approved manner (FOC/NA/106/1934a).

Initially livestock used for draught animals were purchased and fed at government expense. Budgets approved for each settlement in the fiscal year 1937-38 called for the expenditure of \$2,223 at Haricot, \$610 at Lourdes, \$1,000 at Midland and \$1,260 at Brown's Arm for the maintenance of livestock (FOC/NA/130/1937b). It has previously been mentioned that some of the Lourdes families brought livestock with them. These they housed in crude structures of their own design and fed as best they could, using wild pasture in the area during the summer and hay secured from older settlers during the winter. Informants at Brown's Arm and Midland relate that their livestock and poultry were taken away by government officials at their former homes and that it was several years before they were able to secure replacements in the land settlements.

Until the 1945 census was taken quantitative data relating to land use and agricultural production are rather scanty and not always readily comparable for the settlements under discussion. For example, in some years production is

quoted by value for one settlement and by units of production for another. The following summaries for 1939, however, indicate the general pattern of land use for each of the Minor Land Settlements in that year.

Lourdes

A few head of livestock were kept and consisted mostly of sheep. The barns were of poor type and unsuitable for good class livestock....
(FOC/NA/81/1941)

Haricot

20 acres of flat land in river valley used for pasture and hay on a communal basis. 4 acres of cleared land under cultivation per settler. Cultivation ... potatoes, small amounts of turnips and cabbages. Most settlers had a few head of livestock, cows, pigs, sheep, hens and ducks. Most of them had barns which were suitable and in good condition.
(FOC/NA/81/1941)

Midland

Little livestock kept and most of the land cultivated for the production of the staple vegetables which found a good market in Corner Brook. 25 acres of grass land used to grow hay and pasture for community horses
(FOC/NA/81/1941)

Brown's Arm

Crops - potatoes and turnips ... few livestock
(FOC/NA/81/1941)

The above extracts as well as other short descriptions for earlier and subsequent years indicate a trend toward the development of small mixed holdings at each of the Minor Land Settlements but with a definite emphasis on arable/root crop production in Midland and Brown's Arm and on livestock/hay production in Lourdes and Haricot. A summary account of land use and agricultural production for

the years 1944-5 is contained in Table 5.8. Except as indicated, all statistics and calculations are based upon the Newfoundland Census in 1945 and for reasons mentioned above must be viewed only as a crude indication of agricultural activity for the study areas under discussion. In this respect Table 5.8 displays another apparent incongruity in reporting all improved acreages for Lourdes in 1945 as being under hay, yet it showed a fairly significant arable production for 1944.

Broadly speaking, the 1945 census tends to conform the basic conclusion available from archival sources that emphasis was placed on livestock raising in Lourdes and Haricot and on vegetable production at both Midland and Brown's Arm, but that overall a generally mixed farming economy had developed in each of the Minor Land Settlements and had survived at least a few years beyond the withdrawal of government assistance. However, only in the production of potatoes at Lourdes, Midland and Brown's Arm, turnips at Brown's Arm, cattle and sheep at Lourdes was the margin large enough to distinguish what could be considered a small commercial agricultural component from food needs for local subsistence.

Economic Activities of Land Settlers

Many physical and economic factors, most of which have been previously detailed, militated against the

Table 5.8

Population, Agricultural Production and Land Use in Minor Land Settlements 1944-5

Item	Lourdes	Haricot	Midland	Brown's Arm
<u>Population</u>				
Total 1945	456	165	134	133
Estimated Percentage in Land Settlement 1945	<u>50</u>	<u>50</u>	<u>100</u>	<u>80</u>
<u>Improved Acreage</u>				
Total 1945 (Census)	306	99	105	83
Total L.S. 1941 (Archives)	190	150	250	200
Percentage in hay, 1945	100	87	51	65
potatoes, 1945		8	32	22
turnips, 1945		1	12	13
other root, 1945		4	5	
<u>Arable Production per capita 1944¹</u>				
Potatoes, bushels	8.8	6.0	14.0	19.0
Turnips, bushels	0.4	0.5	1.3	27.0
Cabbage, lbs.	13.6	32.2	44.9	3.7
Other root, bushels	0.1	0.3	1.9	0.3
Hay, tons	0.8	0.6	0.6	0.4
<u>Livestock per family, 1945²</u>				
Cattle	3.2	1.2	1.2	1.3
Horses	0.4	0.5	0.5	0.3
Sheep	6.4	1.5	0.0	3.5
Swine	0.1	0.2	0.5	1.3
Poultry	9.0	3.7	10.4	13.2

Source: Based upon 1945 Newfoundland Census.

¹Calculated to nearest tenth from total population.

²Calculated to nearest tenth from total number of families.

development of farming as a full-time occupation in any of the Minor Land Settlements. In some instances social factors were an additional limiting influence. There was clearly a difference between the chances of developing a successful farmstead between the energetic middle-aged settler whose children were of age to provide farm help and whose wife was willing to share the farm chores and the younger settler whose wife was either unwilling to work or burdened with the tasks of raising young children. In Lourdes there was a distinct division of labour between males and females. Men were fishermen; women were farmers. Though men cleared the land, this formed part of their work requirements as land settlers in return for government maintenance. As soon as the land was improved, the work of fertilizing, planting, weeding and harvesting, along with the care of livestock, was left entirely in the hands of the women and older children. In the other Minor Land Settlements men performed most of the farming chores assisted by women. Ofttimes men sought seasonal employment in the summer after planting and until the time that he returned the success of the operation usually depended upon his having a healthy and willing wife who could weed and tend the crops and cut and make the hay, aided by the children, or directing them to do the work. It will be recalled that farming activities in Markland took an abrupt decline as soon as men started to commute to work

outside that settlement. By contrast variations in farming activity from one year to the next or over a longer period of time tended to be less related to changing work patterns of the men in Lourdes than to the changing work patterns of their wives.

Spring and summer lobster and cod fishing together with autumn herring fishing and winter logging formed the main seasonal work routine for the male settlers in Lourdes during the first years of their occupancy. In these activities some principles of co-operation were employed under the direction of the parish priest and the land manager:

Lobster have been caught and canned in 1936 and 1937 and codfish is also being caught and salted in 1937. The arrangement for the time being is that the men take up the various branches of these fisheries as the manager may assign them; and it is proposed to divide the net proceeds of both fisheries among the men concerned in cash in reduction of their maintenance
(FOC/NA/130/1937b)

Additional references show that the normal rate of maintenance was reduced in 1938 by one half, yet the decision to do this appears to have been more related to a measure of success in fishing rather than to the importance of agriculture. When base employment became available at Stephenville in 1941 it had the effect of displacing fishing rather than farming for, as stated above, the latter was basically a female activity. A summary of the occupational histories of the 27 settlers who established

at Lourdes disclose that 20 (74 per cent) worked for variable periods of 1 year to 25 years at the Harmon Air Force Base in Stephenville and that 11 (41 per cent) found permanent employment there to the time of their decease, retirement, or until the base closed in 1966, commuting throughout most of this period on a weekly schedule (See settlers numbered 1-11, Table 7, Appendix C).

In Haricot it was found very difficult to secure full-time local employment even for a population that was greatly reduced by the early 1940s as a result of out-migration. Extracts from reports for 1941 show that the general pattern of non-farming economic activity in this settlement followed after the Markland pattern.

During the fall the saw mill was again operated on a commercial basis which gave the settlers a winter operation; proceeds from sale of lumber were distributed to settlers who took part in the logging operation (FOC/NA/81/1941)

As the settlement is near the American Naval Base at Argentia, most of the settlers have been employed there at some time or other during the year. (FOC/NA/106/1943a)

While base employment was becoming an important factor in changing the pattern of work which state-sponsorship had attempted to impose in Lourdes, Haricot and Markland, Brown's Arm and Midland appear to have been relatively uninfluenced and settlers continued to farm during the summer months and to find employment in cutting and hauling pulp during the winter months.

Services and Village Functions

In Brown's Arm and Midland the children of land settlers attended school in a bunkhouse, for the first year, and schoolhouses were built in 1937. The parish hall and the church basement served the function at Lourdes until a four-room school was constructed in 1941. A schoolhouse was built at Haricot during the fall of 1935.

Because of the diffuse sectarian structure of what were very small populations in Brown's Arm, Haricot, and Midland it was deemed necessary to deal with education on a non-sectarian basis. Religious leaders appear to have been somewhat disgruntled at this approach to education and this created social tensions among the settlers. At first the land settlement school in Haricot attempted to follow the folk curriculum and received praiseworthy comments from Hanley who wrote:

My references to the good schools at Markland and the excellence of the teaching and the curriculum apply also to Haricot. I was particularly impressed with the kind of practical instruction given. (Hanley, 1937; 52)

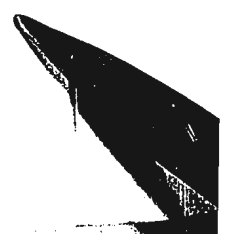
About 1940 a new one-room Roman Catholic School was built midway between the old fishing village of Haricot and the land settlement and on the advice of the priest, children of Catholic land settlers moved to the new school, reducing the number of children in the land settlement school to about 10 pupils. One of the chief problems that arose was securing teachers, for these were appointed by

the various churches. Within a few years after the building of the new school, the remaining Protestant families who had children of school age had left Haricot. One settler who left during this period commented "Religion, that was the only discord there."

The evolution of school systems in Brown's Arm and Midland moved in the same direction as in Haricot with separate denominational schools replacing the amalgamated system imposed by the Land Settlement Board. By the 1950s Brown's Arm had two schools, one operated by the Church of England and the other by the Pentecostal Church. In Midland children of the Roman Catholic, United Church and Church of England settlers eventually found themselves separated and attending denominational schools of their respective churches in nearby Pasadena.

The social implications of the attempt to reorganize the system of education were averted in Lourdes, where oddly enough the government had the least influence on the selection of settlers. In Lourdes children of the old village and the land settlement were all Roman Catholics and education was dealt with by the local Roman Catholic school which operated under the established system.

Except where religious practices could be linked with pre-established institutions in the local region, the settlers generally lacked the regularity of church services



and had to travel outside the settlement considerable distances or, if the matter were not urgent, await the occasional visitation of the clergy for the performances of rites. An example of this is revealed in the fact that all Protestants who died at Haricot were taken back to their original homes for burial since the settlement lacked both the physical and spiritual facilities of accustomed practices.

One important facility that all land settlements lacked initially was a merchant. This gap was filled temporarily by maintenance stores operated by government. In the three-year plan co-operative stores were established to carry on the functions of retailing general merchandise, purchasing seeds and fertilizers, and marketing farm produce. The co-operatives in Haricot and Brown's Arm fared no better and survived no longer than the one at Markland. Both were registered in 1940 and both lost their charters in 1943 (Snowden; 1965, Appendix D.2). A general lack of education and inefficient management resulted in bankruptcy. Evidently some settlers still associated the co-operatives with the government stores and were bent on taking what they felt was rightly theirs. Credit was exploited to such an extent that the stores had no stock or capital. One report even associates the failure of one co-operative with religion, though judging by the fate of

similar operations elsewhere it seems doubtful whether the claim in the following assertion is valid:

... there is much ignorance and prejudice to be overcome at all these settlements while at Brown's Arm even greater difficulties will be encountered owing to the activities of a religious sect which is strongly opposed to co-operation in principle (FOC/NA/149/1943b)

In contrast to the co-operatives in Brown's Arm and Haricot which were replaced by small individual entrepreneurs among the settlers, the co-operative movement survived at Midland and Lourdes and continues to operate in these settlements to the present. Snowden attributes the success of the Lourdes co-operative largely to the fact that it took into membership a large number of persons not involved with the land settlement scheme (1965; 13). Branches of the Lourdes co-operative were established at Long Point, Black Duck Brook, Winterhouse, Three Rock Cove and Mainland and the society grew into the largest supplier and handler of fish products on the outer Port au Port Peninsula and became a sub-contractor for logging operations. Additional factors in the relative success of the co-operative movement in Lourdes appear to stem from the fact that it was initially encouraged through a very active parish priest and was also fortunate in having local leaders who provided the business talents in running its affairs. Despite its long-term success, Lourdes Co-operative Society has had its troubled moments.

Wonders (1951) noted that the co-operative was about to collapse due to mismanagement and rumours of dishonesty which had disturbed the morale of the shareholders. In 1951 the society declared bankruptcy, settled its accounts with the trade by paying back 20 per cent of its debt, and has since gradually recovered under new management.⁴

B. Patterns of Settlement Change, 1945-1969.

Population Growth, Decline, and Change.

Table 5.9 classifies the heads of household occupancy in terms of kin relationship to the original land owners. Based upon this data, it can be seen that the majority of the present occupants in Lourdes, Midland and Brown's Arm consists of first land owners, their sons and other related persons. Two-thirds of the householders in Haricot represent families unrelated to the land settlers resettled under the present government assisted program since 1960. The process of urbanization which has recently affected Pasadena and Midland area explains the presence of most householders unrelated to the land settlers in Midland.

Table 5.10 shows the population change between 1945 and 1966 in the communities of Lourdes, Haricot and Brown's Arm which were in part land settlements and between 1945 and 1969 for Midland which was initially a self-contained

Table 5.9

A Classification of Minor Land Settlement Householders in Relationship
to Original L.D.A. (1944) Land Occupants, 1969

	Lourdes	No. of Householders		Brown's Arm
		Haricot	Midland	
1. L.D.A. (1944) Settlers	11	2	9	8
2. Sons of 1.	31		19	15
3. Other kin to 1.	21		15	7
4. Unrelated to 1.	2	4	8	3
Total householders	65	6	51	33

Table 5.10

Percentage Change in Population in Minor
Land Settlement Communities^x 1945-1969

	Intercensal Period	Percentage change
Lourdes	1945-1966 (936)	+ 106
Haricot	1945-1966 (80)	- 56
Midland	1945-1969 (261)	+ 95
Brown's Arm	1945-1966 (240)	+ 82

^x "Community" refers to whole land settlement and other non-land settlement portions.

Source: 1945 Newfoundland Census, 1966 Census of Canada, and 1969 Field Enquiry.

and physically distinct settlement unit. Compared with the total population in 1945 all communities except Haricot have shown long-term growth. The population in Lourdes has more than doubled since 1945 and in Midland and Brown's Arm has increased by 95 per cent and 82 per cent respectively. By contrast, the population in Haricot has been reduced almost by one-half since 1945 and that in the land settlement part of Haricot by about 78 per cent despite the recent government assisted in-migrants referred to above. With respect to their ranking in a regional hierarchy of settlements based upon population size, Lourdes with a population of 936 was in 1966 the largest centre of population on the Port au Port Peninsula and ranked second to Port au Port (pop. 1,354) 20 miles to the east. Haricot is one of the smallest settlements in the St. Mary's Bay area with the nearest larger settlements being Colinet (pop. 300) 3 miles north west and Mount Carmel (pop. 441) 4 miles south west. Within the last year the land settlement of Midland has been incorporated into the town of Pasadena. Together the two settlements have a population of about 1,500 persons; however, this population still ranks the town only as a second order settlement to Deer Lake (pop. 4,300) 18 miles to the east and third order to Corner Brook (pop. 27,000) 15 miles westward. The population of Brown's Arm places it in the

size-category with about ten settlements with populations in the 100-300 range that are dispersed at intervals of about 2-15 miles distance from the regional centre of Lewisporte (pop. 3,000), 8 miles east of Brown's Arm.

Table 5.11 gives the 1969 population composition of the Minor Land Settlement areas by age-groups and shows the relationship between four groups as follows:

1. children (0-14 years) which can be considered a ratio of dependency and non-productive population
2. young adults (15-19 years) the normal age range of school leavers, including graduates and dropouts
3. adults (20-64 years), the age group which supports the bulk of the population and
4. the aged (65 years and over) who receive government pensions and are not normally economically dependent or productive.

Lourdes, Midland and Brown's Arm exhibit features of a progressive, or growing population, in that each has almost one half of its population in the dependency class and a declining proportion of persons in the older age classes. Haricot, by contrast, shows a retrogressive, or declining population, trend. Here one-third (33 per cent) of the population is beyond the retirement age of 65 years and there are no persons presently resident in the age-group (15-19 years) to provide a replacement population in the immediate future.

Table 5.11

Age-Sex Structure of Population in Minor Land Settlement 1969

Age-group	Lourdes			Haricot			Midland			Brown's Arm		
	No											
	M	F	T	M	F	T	M	F	T	M	F	T
0-19	123	114	237	4	1	5	74	70	144	59	45	104
20-44	52	53	105	2	2	4	36	32	68	30	25	55
45-64	18	12	30	3	-	3	19	18	37	7	7	14
65 over	9	12	21	2	4	6	6	6	12	4	1	5
Total	202	191	393	11	7	18	135	126	261	100	78	178

Percentage in Selected Age Groups

Age-group				
0-14 (dependents)	49	28	45	47
15-19 (school leaving)	12	0	10	11
20-64 (producers)	34	39	40	39
65 over (aged)	5	33	5	3

It was shown in the previous chapter that the process of population replacement in Markland has been in the past and continues to be in the present primarily a selective function of persons who have both failed to complete school and failed to secure permanent employment elsewhere. Table 5.12 provides data on the level of education and place of residence of students leaving school in the Minor Land Settlements during the past five years. The results show some interesting parallels with Markland and some interesting variations. Firstly the degree of success in students attaining the final year of school has been very much higher at Lourdes than at any other settlement in this study, yet the settlement has retained a high proportion of school graduates (6 out of 15 males) besides all of the male drop-outs (Grades VII-X). Females appear to show a greater propensity to leave Lourdes upon leaving school than males, irrespective of Grade level. The main reason for the retention of school graduates is related to opportunities at home. Most boys completing school as well as some girls remain at home to teach at Lourdes after spending a year or more at Memorial University in St. John's. Practically all of the teachers engaged in the 25 classrooms at Lourdes in 1969 were themselves former graduates of the local school system, and primarily descendants of the original Lourdes land settlers (Farewell, 1969, pers. comm.). In Midland many

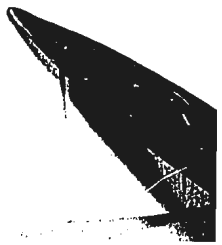


Table 5.12

Level of Education and Place of Residence of Students leaving school
in Minor Land Settlements 1964-1969

Last Grade taken	Lourdes			Haricot			Midland			Brown's Arm		
	M	F	T	M	F	T	M	F	T	M	F	T
XI	15	15	30	-	1	1	2	2	4	1	2	3
VIII - X	4	10	14	3	-	3	4	3	7	3	3	6
VII or lower	2	-	2	-	-	-	1	1	2	2	2	4
Total	21	25	46	3	1	4	7	6	13	6	7	13
	(a) no. at home			(b) no. elsewhere Nfld.			(c) no on Canadian Mainland					
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
Males with												
Grade XI	6	8	1	-	-	-	1	1	-	-	-	1
VIII-X	4	-	-	-	1	2	3	1	-	1	-	2
VII or lower	2	-	-	-	-	-	1	-	-	2	-	-
Total, males	12	8	1	-	1	2	5	2	-	3	-	3
Females with												
Grade XI	4	11	-	-	1	-	2	-	-	-	1	1
VIII-X	5	4	1	-	-	-	2	-	1	-	2	1
VII or lower	-	-	-	-	-	-	-	-	1	2	-	-
Total, female	9	15	1	-	1	-	4	-	2	2	3	2

students, both male and female, tend to remain at home after leaving school and become daily commuters to employment in Corner Brook and environs. In Brown's Arm all students completing high school between 1964 and 1969 have left the settlement. Among those who failed to complete school there is a high propensity, especially among males, to remain at home or to migrate to the Canadian mainland, particularly to Toronto where they find employment in factories and process industries. Table 5.13 shows that about one-quarter of the students now in school from the land-settlements of Lourdes (27 per cent) and Brown's Arm (24 per cent) are below the grade level normal for their respective ages and, therefore form a high potential for school drop-outs and hence for replacement population to ensure continuance of settlement in the future. The process of urbanization will likely cause the population of the Midland area to soar within the next decade irrespective of trends within the present population composition. All indications are that Haricot will continue to decline.

It has been shown that changes in the population of the land settlements during the first decade were strikingly more pronounced in settlements which were started with the more religiously diverse populations and where the population of the land settlement represented an

Table 5.13

Age-Grade Level of School Children in
Minor Land Settlements, June 1969

						Lourdes		Haricot		Midland		Brown's Arm	
						No	%	No	%	No	%	No	%
Students in age-grade norm						91	59	4	100	81	70	53	74
" above " " "						22	14	-	-	22	19	1	2
"	1	age-grade	below	norm		24	16	-	-	6	6	11	14
"	2	age-grades	"	"		9	6	-	-	4	4	6	8
"	3	"	"	"	"	6	4	-	-	1	1	1	2
"	4	"	"	"	"	2	1	-	-	-	-		
Total students below (potential drop-outs)						31	27	0	0	11	11	18	24

Table 5.14

Percentage Change in the Religious Structure of
Midland and Brown's Arm, 1945-1969

Roman Catholic	+ 28	75	-	0
Anglican	- 15	15	- 20	12
United Church	- 16	6	+ 10	10
Salvation Army	+ 1	2	- 8	3
Pentecostal			+ 16	73
Others	+ 2	2	+ 2	2
	<hr/>	<hr/>	<hr/>	<hr/>
Total	0	100	0	100

anomalous feature within its particular district. For example, by 1945 Brown's Arm had become a predominantly Pentecostal settlement; Haricot and Midland, predominantly Roman Catholic settlements. By 1969 these processes of change were even more advanced along the same lines. Lourdes, which began as Roman Catholic settlement, has remained Roman Catholic exclusively to the present, and only Roman Catholics presently inhabit Haricot. Table 5.14 shows the changes in the religious structure of Midland and Brown's Arm between 1945 and 1969. In the former Roman Catholics have increased by 28 per cent and now form 75 per cent of the population. In the latter Pentecostal affiliates have also increased proportionately to the total population and now represent about three-quarters of the population. The increase of United Church persons in Brown's Arm is due to the in-migration of two families since 1945 and a reaffirmation in allegiance of another family who were temporarily Pentecostal converts.

Occupational Characteristics of the Population, 1969.

Table 5.15 classifies the occupational status of the adult population of the Minor Land Settlement study areas for 1969. Housewives are excluded from this table; however, females employed in wage work are included. Generally, females form a very small proportion of the total labour force in all settlements included in this

Table 5.15

Occupational Status of Adult Population in
Minor Land Settlements, 1969

Occupation	No. of Persons			
	Lourdes	Haricot	Midland	Brown's Arm
Professional	14	-	3	-
Managerial, Technical	2	-	6	-
Labouring	3	-	1	2
Services	13	-	17	3
Main. Constr. Corp.	8	2	20	12
Fishing	19	1	-	-
Farming	-	-	3	3
Transport	2	-	1	1
Logging	1	-	-	11
Unemployed	10	-	6	8
Disabled	11	1	3	2
Retired	21	6	12	5
Other	104	10	57	48
Females active in Labour Force	12	0	5	1

study, even though they are more numerous than in the past and will likely become more active in the future, as social change and improved educational opportunities make it possible for women to escape from their traditional roles of housekeeping and supplemental labour supply to the efforts of their husbands. Table 5.15 shows that in 1969 Lourdes had about one-fifth of the adult population in retirement and one-fifth divided between disabled and unemployed persons. In the active working group persons employed in fishing, teaching (professional) and services formed almost one-half of the total adult population. Haricot had 60 per cent of the adult population in retirement. In Midland the construction industry and services engaged about one-half of the total adult population and almost three-quarters of the active work force. Logging and construction work engaged more than two-thirds of the Brown's Arm active employed. Notable by its lack of prominence is the small number of persons engaged in cash income farming. Brown's Arm had three vegetable farmers in 1969 and Midland, a single dairy farmer along with a father and son team self-employed in a poultry business. On the other hand there was a fairly large number of unemployed in Lourdes, Midland and Brown's Arm and these in the main were youthful, unskilled, and landless.

Farming is, however, not quite so dispirited or so insignificant as the statistics in Table 5.16 would indicate, for Table 5, Appendix C shows that a significant proportion of families in Lourdes, Haricot and Brown's Arm do engage in some farming - either livestock or vegetable growing, or both. For the most part the household cash income comes from other sources of employment and farming is mainly a supplemental or recreational activity. Two of the occupational groups whose role in keeping livestock and gardening is hidden in conventional occupational classifications are the retired persons and housewives. For example, all four of the males over 65 years at Brown's Arm supplement old age pension income by raising vegetables and keeping some livestock.

Table 5.16 indicates the disposition of the active work force in relation to the settlement of residence. In Lourdes 45 persons (72 per cent) were working at home, and 26 persons (41 per cent) were self-employed. At each of the other three settlements the active labour force was largely one commuting to work distances of less than 50 miles from their respective place of residence to wage job forms of activity. As in Markland the effect of recent road improvements and the acquisition of personal mobility have had a profound effect on the commuting pattern as known in the past when outside jobs were taken on a seasonal

Table 5.16

Place of Employment of Active Labour Force
in Minor Land Settlements, 1969

	Lourdes	Haricot	Midland	Brown's Arm
<u>Place of Work</u>				
1. At home	45	1	13	5
2. Elsewhere (commuters	17	2	43	27
(a) within 50 miles	10	1	38	20
(b) over 50 miles	7	1	5	7
3. Total active	62	3	56	32
(a) self-employed	26	1	6	3
(b) in wage work	36	2	50	29

basis. Today most workers commute daily to work; some weekly, depending upon both the distance and the nature of the work. Brown's Arm loggers, for example, formerly went into the woods in the fall or winter and stayed the duration of the cutting and hauling season. Today pulp-cutting is very largely carried on during the summer months, due to technological innovations and change in the industry itself; however, road linkages and the privately owned motor car, now make it practical for loggers to commute between Bishop's Falls or Millertown and home each weekend.

It is evident that there exists little in economic characteristics of the Minor Land Settlement populations to distinguish them from populations in adjoining and neighbouring settlements. The fortunes of the settlements have been very closely linked with the fortunes of the regions in which they were located. Commuting, for example, is very largely a localized activity and related to opportunities within a fairly restricted distance from the place of residence (Table 5.16). A work shortage in the Port au Port district as a whole helps to account for the large proportion of persons working at home, self employed and unemployed in Lourdes. An increase in work opportunities at Stephenville, providing certain proposed industries such as a paper-liner board mill become a reality, could very greatly change the present position and

orient the settlement toward more active commuting for the labour force, thus reverting to the pattern that existed while the Harmon Air Force Base was in existence and one that parallels current patterns in Midland and Brown's Arm.

Present Pattern of Settlement

Table 5.17 indicates the changed density of settlement in terms of number of dwellings occupied in each Minor Land Settlement area between the period 1935-6 and the year 1969. In each instance it can be seen that changes in numbers of dwellings in each land settlement follows the same trend as that for the whole settlement though varying in the rate of change. Proportionately the number of occupied dwellings have increased more rapidly for Lourdes land settlement (141 per cent) than in Lourdes as a whole (104 per cent). Household units in Haricot were in 1969 exactly one-half the number there in 1935-6, yet this decline was less than that in the land settlement of Haricot where the number of occupied dwellings fell by 76 per cent. Like Lourdes, the Brown's Arm example has shown an increase in household units but with a rate of growth in the settlement as a whole that proportionately doubled that in the designated land settlement area.

Changes in the number of occupied dwellings over a period of time, which generally follows from similar

Table 5.17

Absolute and Percentage Changes in Occupied Dwellings
in Minor Land Settlements, 1935-1969

Settlement area	No. of Dwellings Occupied		Absolute change	Percentage change
	<u>1935-6</u>	<u>1969</u>		
1. Lourdes, total	55	133	+ 78	+ 104
" land settlement	27	65	+ 38	+ 141
2. Haricot, total	32	16	- 16	- 50
" land settlement	25	6	- 19	- 76
3. Brown's Arm, total	29	48	+ 19	+ 66
" " land settlement	25	33	+ 8	+ 32
4. Midland	25	51	+ 26	+ 104

changes in the population as a whole, naturally affect the division of land and the pattern of settlement. The construction of new and additional dwelling units must result either in the closer spacing of settlement or in the expansion of the settlement area by taking in new and unoccupied land. By contrast, migrations and other processes of population depletion generally result in a decrease in dwelling density and this effect upon settlement patterns represents a process of dispersion - a process that has affected the settlement pattern in Haricot.

In Lourdes an increase in dwelling density along the road frontages of the first land settler holdings has resulted in increased agglomeration in the central area. On the other hand Lourdes settlement has expanded along the three road access routes leading to West Bay ($\frac{1}{2}$ mile), Three Rock Cove (2 miles) and Winterhouse (1 mile) in a ribbon-form development outward from the land settlement area (Fig. 5.8). Settlement growth in both Brown's Arm and Midland has been in years subsequent to initial land settlement largely confined to infilling and subdivision of road space, the spatial limits of which were reached in the first years of occupancy. A re-siting of some settler cottages from the land settlement area onto land occupied by the old Brown's Arm settlement tends to blend both parts of this community together with respect to this

visual aspect of the cultural landscape.

Land Ownership Patterns

Any increase in the number of home owners within the confines of areas designated for land settlement purposes were, until 1962, strictly illegal according to the conditions of the grants issued. (See Appendix B.3). It is quite evident that original land owners did permit their married sons and other relatives to construct homes on their properties, in all settlements where population pressures to settle were exerted and that the 1962 amendment to the Land Development Act merely permitted an acceleration of a process that has been operating previously. For the most part present home owners have acquired their various land properties through a system of inheritance (Table 5.18). Land exchange through purchase has been less frequent but when transacted has generally acknowledged the condition of the LDA (1944), that the whole property covered by the grant was to be sold. Since 1962, land sales have been much more active, particularly at Midland. There has been a greater propensity for Protestants to sell land, whereas Roman Catholics apparently adhere much more rigidly to traditional practices in land tenure. This difference is apparent in the greater number of land sales in Brown's Arm as compared with Lourdes, but particularly in evidence in Midland where Protestants,

Table 5.18

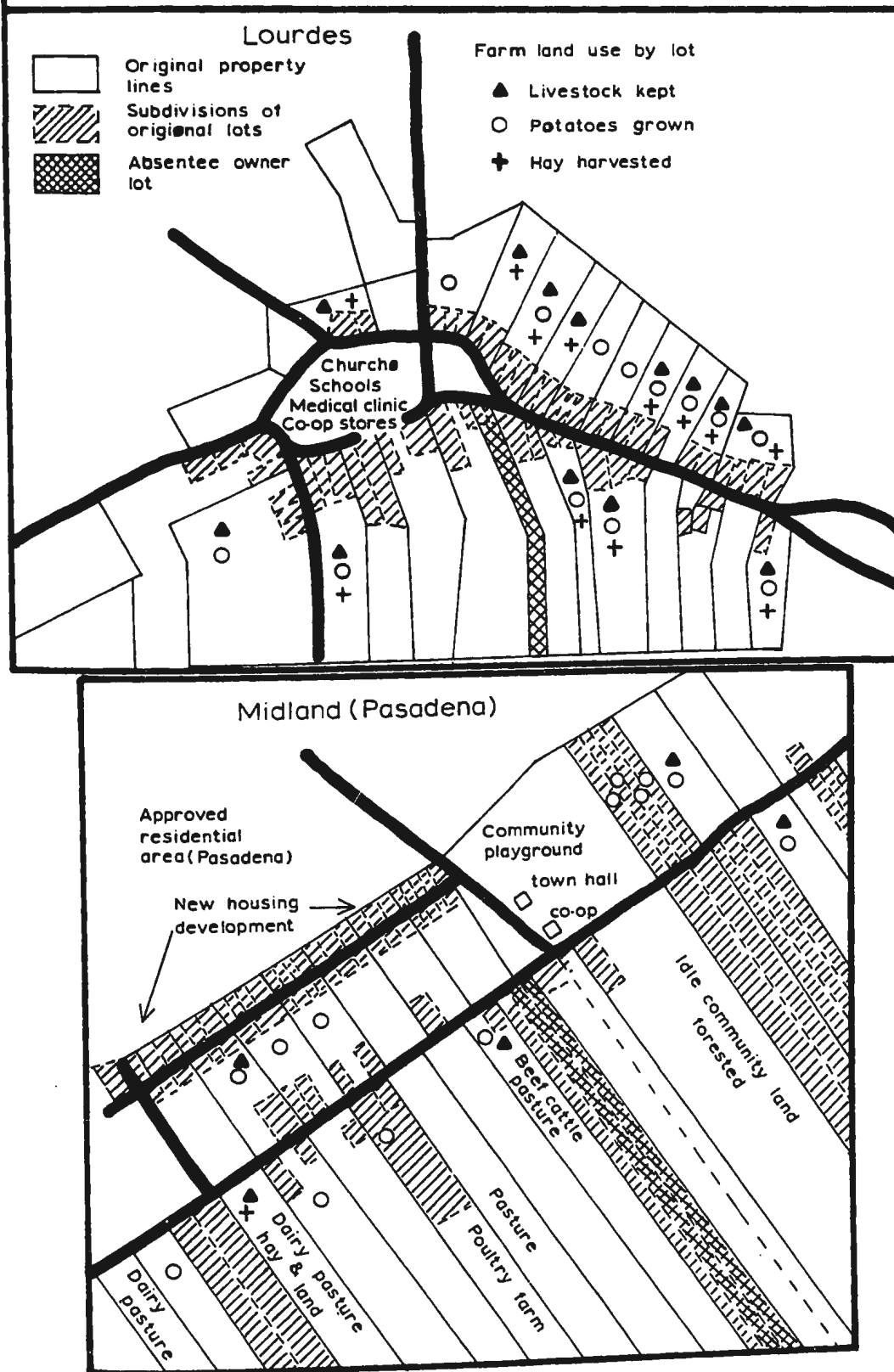
Methods of Acquiring Land by Householders Resident
in Lourdes, Midland and Brown's Arm, 1969

Acquiring land through	Number of householders		
	Lourdes	Midland	Brown's Arm
1. Land Development Act (1944)	13	10	10
2. Purchase	3	11	9
3. Inheritance or gift	48	30	14
4. Squatting	1	-	-
Total no. of householders	65	51	33

even though they form a minority of the householders in residence, sold 10 of the 11 land units shown as purchased in Table 5.18.

Figure 5.8 shows the present pattern of land ownership in relation to original holdings at both Lourdes and Midland, resulting primarily from the process of land subdivision among the increasing numbers of household units in the period from around 1945 to 1969. In Midland it can be seen that some of the original land holdings have been subdivided along the road side and throughout the entire length, but that most subdivisions represent small road side units used for building lots. The housing development subdivision on former land settlement holdings toward Pasadena shows the urban influences that are likely to transform the entire settlement landscape within a decade or so. Land values have increased rapidly within the last few years, rising from about \$200 for a one-fifth acre building lot to \$750 or more presently. Figure 5.8 shows that subdivision of land in Lourdes has amounted to the parcelling out of land in small units along the main settlement road for the purpose of providing building lots. These lots are usually fenced off from the original or paternal homestead and enclose the small patches of land used for kitchen gardens. Most of the fences around the original holding are still maintained and land unfenced for building lots is sometimes used to grow hay or pasture for livestock.




Patterns of land tenure and land use in Midland and Lourdes 1969



Land Expansion, Abandonment and Use

There is little evidence either in the government records or on the present day landscape to indicate that woodland clearances on the holdings of the settlers in the Minor Land Settlements have been expanded much beyond the limits that existed in 1942. No additional acres have been reclaimed either in Lourdes or Haricot, and most of the improved land in the latter has been abandoned and overtaken by brush and trees. In Midland 9 acres of land have been improved since 1942, and paradoxically by two persons who on their own initiative have purchased vacant holdings and established agricultural ventures there within the last decade. One man presently operates a dairy farm and the other operates a small supermarket while raising a herd of 12 beef cattle. Ten individuals in Brown's Arm have had a total of about 40 acres added to the improved acreage provided by government during the period 1936-1942. These extended clearances vary between 1-10 acres on individual holdings and represent attempts on the part of a few families to increase cropped land and hence the economic viability of their land holdings. Figure 5.9 shows that post-1942 extensions of improved land in Brown's Arm are still within the confines of limits designated for land settlement development, i.e. on original holdings granted under the LDA (1944).

WOODLAND CLEARANCES BROWN'S ARM 1934-1969

-  Land improved 1934-42
-  Land improved 1943-69
-  Land settlement boundary
- W Woodland
- A Alder
- M Marsh, bog
- G Gravel quarry

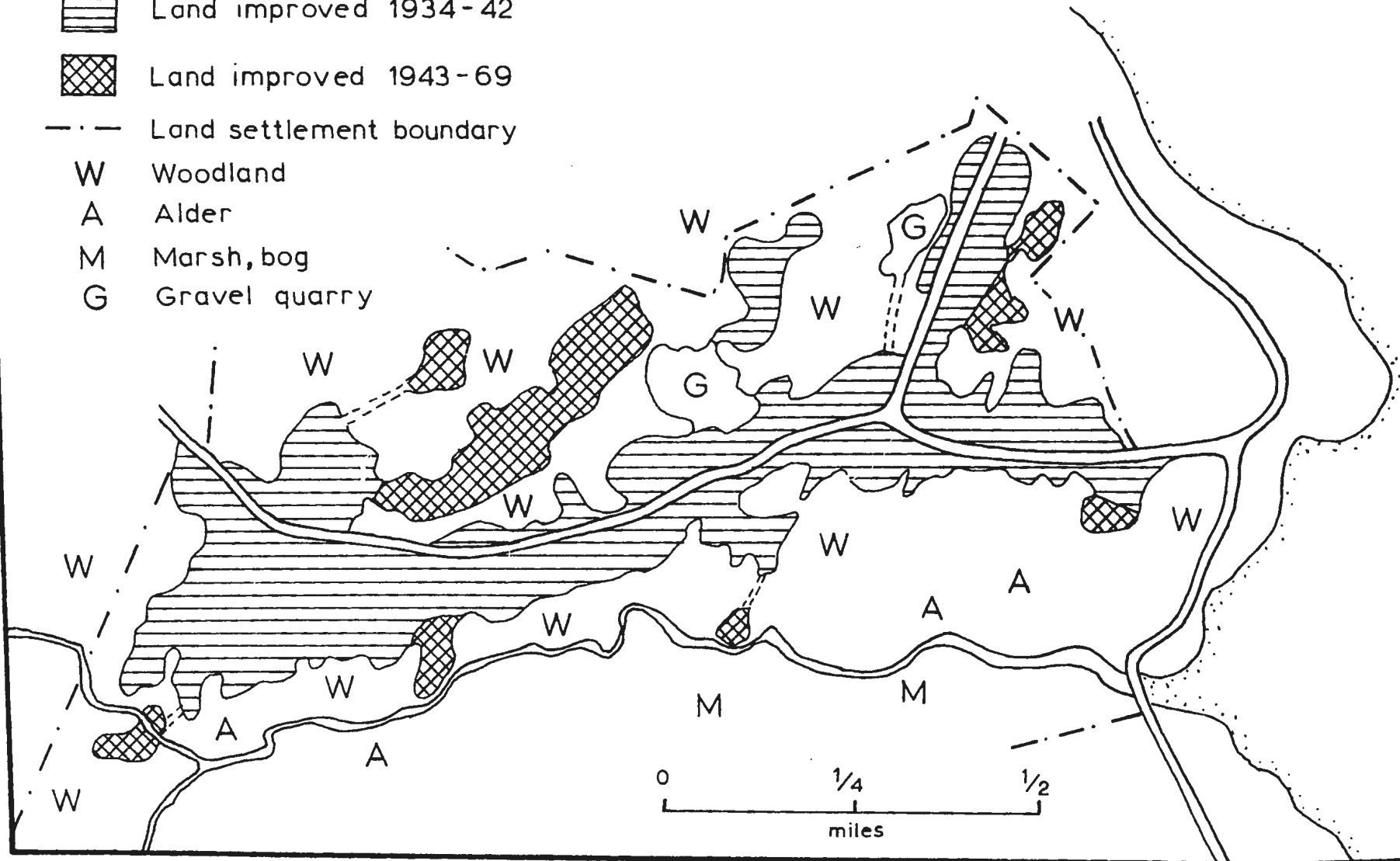


Figure 5.9

In the Markland example it was shown that almost half of the original privately granted acreage is presently held by absentees. The percentage of acreage held by absentee owners in the Minor Land Settlements relative to the total acreage granted are as follows: Lourdes, 3 per cent; Haricot, 59 per cent; Midland, 5 per cent and Brown's Arm, 14 per cent.

Increases in population on the former land settlement holdings have not been matched by any general increase in land use, judging by present day per capita vegetable production and per household livestock production as compared with 1945. In Table 5.19 it can be seen that the per capita production of potatoes, which has declined (from 1945 by 88 per cent, is the only root crop still being produced at Lourdes and that the per household production of livestock items has declined by 75 per cent or more. Though Haricot, Midland and Brown's Arm each exhibit features of general decline in agriculture there are a few anomalous increases. Per capita potato and turnip production in Haricot is presently more than double that for 1945. A single dairy herd and a few beef cattle maintained by two individuals account for the relatively low decline in per household production of cattle at Midland. Similarly the increase per household production of poultry in Midland represents the efforts of a single family egg-farm operation. In these instances the farming

Table 5.19

Percentage Change in per capita production of Vegetables
and per household Production of Livestock
in Minor Land Settlement 1945 and 1969

Item	Lourdes	Haricot	Midland	Brown's Arm
1. Vegetable (unit)				
Potatoes (bushels)	- 88%	+ 116%	- 85%	- 45%
Turnips (bushels)	- 100%	+ 140%	- 69%	- 84%
Cabbage (lbs.)	- 100%	+ 3%	- 55%	+ 2459%
Other root (bushels)	- 100%	-	- 50%	+ 500%
2. Livestock, number				
Cattle	- 97%	- 75%	- 17%	- 100%
Horses	- 75%	- 80%	- 80%	-
Sheep	- 81%	- 93%	-	- 97%
Swine	-	- 50%	- 100%	- 92%
Poultry	- 94%	- 57%	+ 880%	- 80%

Source: Calculated from data in Table 5.8 and Table 6, Appendix C.

specializations of one or two individuals conceals the decreases in farm production and agricultural activity of the majority of families.

It is shown in Table 5, Appendix C that 75 per cent of the present occupants in Brown's Arm engage in some farming activity; that 60 per cent grow some vegetables, that 39 per cent keep livestock and that 12 per cent keep poultry, but that only 4 householders (12 per cent) produce more than is required for household needs. In Table 5.19 the 2,459 per cent increase in cabbage and 500 per cent increase in "other root" per capita production derives almost entirely from the production of two individual farms and not from any general increase in farming activity within the settlement as a whole. In terms of future prospects for agriculture, the fact of absentee ownership in some settlements might be regarded as a deterrent. Presently, however, the fact that a large proportion of land once in production, now lies idle and neglected at the hands of resident householders appears to be a much more problematic issue. The few who have tried to develop economic farm units have had to gamble on increasing improved acreages on lands much more marginal than land improved during the earlier years of settlement development and now lying idle.

Service Facilities

At this particular point in time, and in the immediate past particularly since Newfoundland became a Canadian province, rural communities throughout the island are, and have been going through phases of transition much more rapid than at any time during previous history. Many of the changes have greatly affected the way of life in the land settlements under discussion in much the same way as in other rural settlements. Since 1949 all Minor Land Settlement areas have received electricity and household telephone services. Road improvements and the acquisition of motor vehicles have increased the frequency of commuting among settlements for working, shopping and recreation, and have aided government, commercial and social agencies to centralize certain services. Thus whereas each community formerly had its own schools, post offices and stores, today the ease with which year round interlinkages can be maintained among groups of settlements the number and volume of services are declining in the smaller sized communities but are increasing in the larger and more centralized communities.

In that Haricot, Midland and Brown's Arm are each in a peripheral settlement location and smaller in size than surrounding communities, the process of centralization has tended to reduce their importance in providing services for the resident populations. Schools have recently been

closed at all three settlements and children now commute daily to nearby centres by bus; from Haricot to Mount Carmel; from Midland to Pasadena, Corner Brook and Deer Lake, and from Brown's Arm to Lewisporte. By contrast, Lourdes occupies the central place for increased services on the outer Port au Port Peninsula. There a new 5-room high school and an enlarged 20-room primary and elementary school provide the educational opportunities offered to children commuting from Winterhouse, Black Duck Brook, West Bay and Mainland. Similarly the Lourdes Co-operative Society formerly operated individual retail branches at Lourdes, Mainland, Black Duck Brook and Winterhouse. Today an expanded operation in Lourdes serves the same communities and branch stores have been closed.

Table 5.20 shows that for all establishments, institutions and service facilities in the Minor Land Settlement Areas the number has more than doubled in Lourdes since 1956, whereas the number at Haricot, Midland and Brown's Arm have in each community declined.

Table 5.20

Establishments, Institutions and Facilities in Minor
Land Settlement Communities 1956(A) and 1969(B)

Type	Lourdes		Haricot		Midland		Brown's Arm	
	A	B	A	B	A	B	A	B
1. Economic								
Stores - confectionery	-	1	-	-	-	1	1	-
- small grocery	-	1	2	1	-	1	1	1
- general	2	2	-	-	-	-	1	1
- Co-op retail/supermarket	1	1	-	-	2	2	-	-
Automotive - gas tanks	-	2	-	-	-	-	-	-
- garage	-	1	-	-	-	-	-	-
Transportation - Taxi	2	2	-	-	-	-	-	-
- Bus	-	2	-	-	-	-	-	-
- Trucking	-	2	-	-	-	-	-	1
Manufacturing - saw mill	1	1	1	1	-	-	-	-
- fish plant (salt)	1	1	-	-	-	-	-	-
2. Political								
Medical - clinic	-	1	-	-	-	-	-	-
Federal - Post Office	1	1	1	-	1	-	1	1
- Bait Depot	-	1	-	-	-	-	-	-
Local - School Board	1	1	-	-	-	-	2	-
- Community Council	-	1	-	-	1	-	-	-
3. Social								
Church - Roman Catholic	1	1	-	-	-	-	-	-
- Protestant	-	-	-	-	-	-	-	1
Schools - All grade	1	-	1	-	1	-	2	-
- elementary	-	1	-	-	-	-	-	1
- secondary	-	1	-	-	-	-	-	-
Total	11	24	5	2	5	4	8	6

Source: Newfoundland Year Book and Business Directory 1956 and Field Enquiry 1969

CHAPTER VI

The Small-Holding Land Settlements

A. Population Structure and Settlement Development to 1945.

Pattern of Settlement by Background

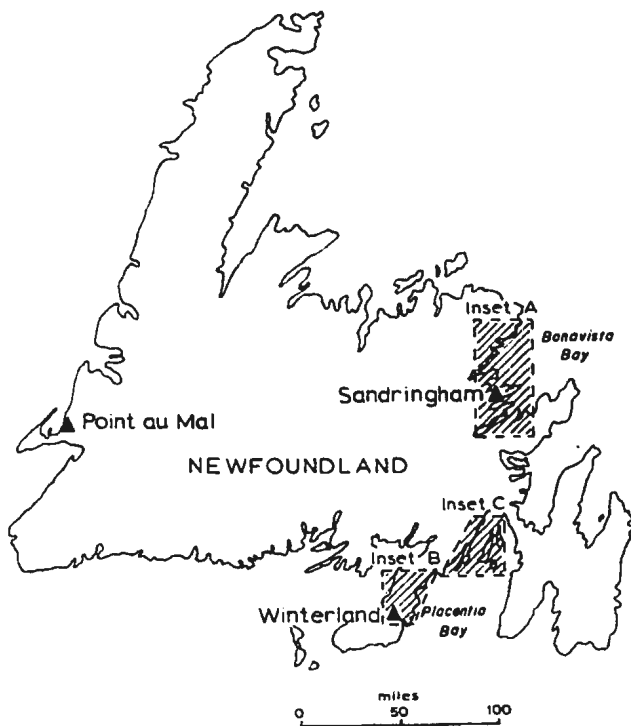
Figure 6.1 shows the pattern of settlement by the place of origin of families accepted into the small-holding projects at Sandringham, Winterland and Point au Mal. In Sandringham settlers were selected from the neighbouring places of Eastport, Happy Adventure, Salvage and Flat Island and more distant places to the north and south in Bonavista Bay. In Winterland families were drawn from neighbouring places as well, and came mainly from the island settlement of Port Elizabeth (formerly known as Flat Island) in Placentia Bay, and Garnish, a centre of the banks fishery on the western side of the Burin Peninsula. In contrast to these relatively localized migrations, where most settlers had some environmental foreknowledge of the areas into which they were moving, the Point au Mal settlement was populated by families from the scattered island and coastal settlements on the west side of Placentia Bay. Their exodus covered some three hundred miles into a promised land described by the officials whose responsibility it was to travel around Placentia Bay selecting families for the scheme.¹

LOCATION OF SMALL HOLDING LAND SETTLEMENTS 1939 - 1940

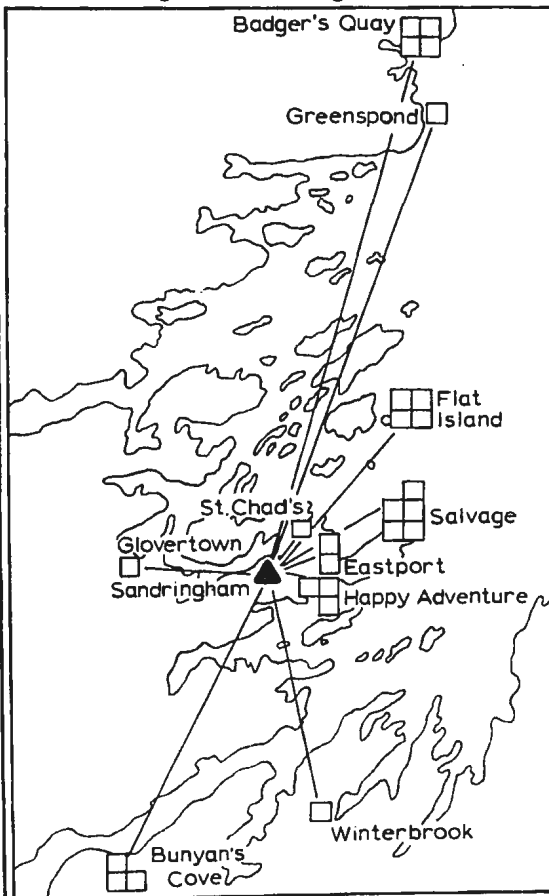
▲ Small Holding Settlements

Inset show regions supplying original settlers.

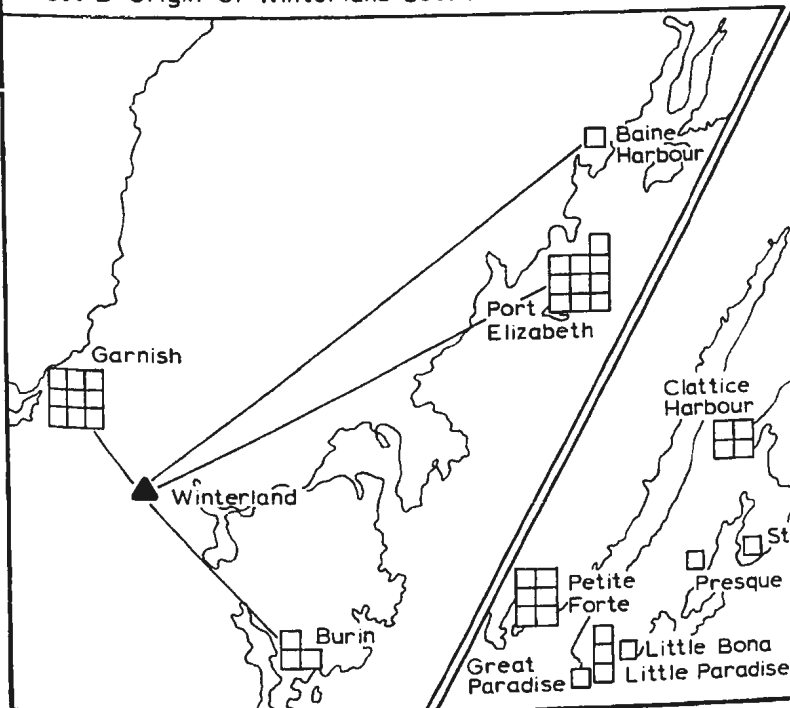
One square represents one family.



Inset A: Origin of Sandringham Settlers



Inset B: Origin of Winterland Settlers



Inset C: Origin of Point au Mal Settlers

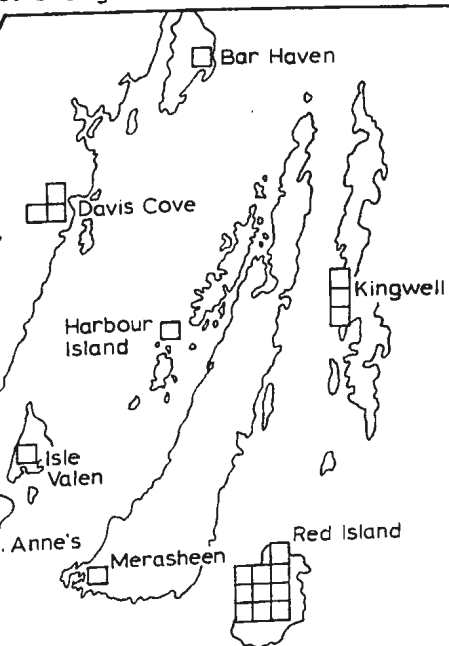


Table 6.1 shows that small-holding land settlers were drawn mostly from among fishing families. Sandringham was rather exceptional in having at least one family whose former roots were drawn from the land.

Table 6.1

Occupational Background of Land Settlers
in Small Holding Land Settlements

Occupation	Sandringham		Winterland		Point au Mal	
	No	%	No	%	No	%
Fisherman	18	72	23	100	34	89.5
Farmer	1	4				
Carpenter	1	4				
Labourer	1	4				
Other/unidentified	4	16			4	10.5
Total	25	100	23	100	38	100.0

Table 6.2

Selected Population Characteristics of Original
Families in Small-Holding Land Settlements, 1940

	Sandringham	Winterland ¹	Point au Mal ²
1. No. of families	25	23	38
2. Total population,	111	92	235
approx.			
3. Mean family size	4.4	4.0	6.2
4. Smallest family unit	2	2	4
5. Largest family unit	9	8	9
6. Mean age of settlers	41.7	32.7	37.7
7. Youngest settler	21	25	29
8. Eldest settler	58	44	47

Source: Field Enquiry, 1969.

¹ Items 2-8 based upon complete data for 10 family units

² Items 2-8 based upon complete data for 15 family units

As in the five earlier projects, age and family size were not rigorously applied criteria in settler selection. Table 6.2 shows that some settlers in the small-holding schemes were in their early twenties while others were nearing the late middle age or early elderly categories. Though data are not complete in all calculations shown for Winterland and Point au Mal, and this may admit some element of bias, it would seem Winterland settlement consisted of mostly young male family heads (mean age 32.7 years). By comparison Sandringham settlers were mostly fairly well advanced in age with the mean age of initial settlers being about 42 years. Families varied in size from 2 to 9 persons. Comparatively the Winterland families were the smallest (averaging 4.0 persons per unit), among both the small-holding and the earlier land settlements.

A certain importance may be attached to age and family size, because the more elderly tended to have less prospective working years left than the young, and the larger families had more potential work units. By contrast, the more elderly as we have seen from the previous chapters were less shiftless, that is less apt to move away from the scheme than the younger men. The smaller families had axiomatically fewer dependents, and could manage on a smaller income. Though they are more difficult to measure quantitatively, no variables of population appear to have been more

important, barring other disturbing factors such as ecologic restraints and alternative work, than the sheer industriousness of the men and the supporting role of their wives. Two of the small-holding settlements, namely Sandringham and Winterland, evolved beyond the stage where farming was a supplemental activity and became very quickly commercial farming settlements, though based upon economically marginal production outputs and intensive labour inputs by the family unit. Without exception, the successful settlers were aided by their wives in all but the heavier tasks of farming, and in some cases, as at Winterland where one settler had lost an arm, the woman avoided no work that a man would undertake. Not only were women important driving forces behind the settlers who did succeed, their thriftiness in managing household income whether in kind or in cash, was equally as important. Informants, particularly those from among the land settlement managers interviewed, stress the fact that equal income tended to vary in its effectiveness in improving the standard of living of families after the homemaking habits of the wives.

It has been noted that both the religious denominational structure of the district and denominational affiliation of settlers were considered factors in the selection of families for small-holding settlements. Sandringham was intended to be a Church of England settlement. (See Appendix A, entry dated June 27). Roman Catholic

families were chosen for Point au Mal, while it was proposed to populate Winterland with United Church families. Outside of Point au Mal, the specifics of these principles were not strictly enforced, either because, as some informants suggest, certain families pretended for the purposes of entry to be an adherent of the chosen denomination, or because of the leniency of the land managers. The Newfoundland Census for 1945 shows that the total population (186) of Point au Mal, including old and recent settlers, belonged to the Roman Catholic Church. Table 6.3 shows that 90 per cent of the persons resident in Sandringham in 1945 adhered to the Church of England and that the remainder were spread among three other churches. The Roman Catholic population (2 per cent) in Sandringham represents the family of a district agricultural representative who was stationed in the settlement and living in the former land manager's house after 1942. In Winterland the designated denomination, the United Church, according to the 1945 census, formed only slightly more than one half (53 per cent) of the total population.

Very little mention has been made thus far concerning the settler level of education either in the small-holding scheme or in the earlier schemes. Indeed official sources are not only few but of doubtful reliability. The censuses for 1935 and 1945 record categories of literacy and illiteracy

Table 6.3

Population by Religious Denomination in
Small-Holding Land Settlements, 1945

Number and Percentage of Persons

Denomination	Point au Mal		Sandringham		Winterland	
	No.	%	No.	%	No.	%
Roman Catholic	186	100	3	2		
Church of England			120	90	22	28
United Church			8	7	42	53
Salvation Army					14	18
Other			1	1	1	1
Total	186	100	132	100	79	100

Source: 1945 Newfoundland Census

for the population of settlements 10 years of age and over.
The percentage of literate persons over ten years old is
shown for each land settlement in Table 6.4.

Table 6.4

Percentage Literacy^x for Populations of Land
Settlements 10 years of age and over, 1945

Markland	95	Midland	89
Haricot	90	Sandringham	86
Lourdes	63	Winterland	84
Brown's Arm	88	Point au Mal	80

Source: 1945 Newfoundland Census

^x Literacy is defined in the Census in terms of persons
who can 'read and write' and 'read only'.


The relatively low literacy rate (63 per cent) in Lourdes is probably due to the fact that about one-half the population consisted of earlier French ethnic settlers, for whom the literacy rate in the 1935 census was 33 per cent. A limited amount of data collected on years of schooling suggest that men generally tended to have fewer years in school than women and that some men had not attended school at all. From a sample of twelve original families in Sandringham, it was found that the males averaged 4.3 years of schooling; however, one had seven years and two others had not attended school. In the same group wives had each attended school for a minimum of two years while one had attained eight years. Available evidence suggests that education among the settlers was generally of a very low level and that there were only slight variations among the settlements, but that the greater variations existed among the individual families within the individual settlements.

Population Changes 1940-1945

The population included in Table 6.3 represents the group of settler families that had established in the Small-Holding Settlements around 1945, that is, the settlers and the families to whom land grants were issued. Altogether 86 families were placed in the small-holding settlements in

1940: 25 in Sandringham, 23 in Winterland and 38 in Point au Mal. By 1945 Sandringham retained 22 (88 per cent) of the initial group and had acquired three replacement families. In the same period Winterland had lost six families, retained 17 (74 per cent) of the initial group of families, but attracted no replacements. Point au Mal land settlement lost eight original families through outmigration in the first five years, leaving 30 (78 per cent) of the first group and acquiring four replacement families. In summary the number of families resident in small-holding land settlements in 1945 was 76 as compared to 86 in 1940. Though these settlements had been in existence for a shorter period the retention rate of original families in small-holding settlements in 1945 was 80 per cent in comparison to 50 per cent in the five earlier land settlements.

One of the settlers leaving Sandringham was asked to depart (see Appendix A, April 10 and 12), another was attracted away by a job opportunity and the third settler left after his wife died. Replacements were recruited from three of the settlements supplying first settlers - namely Eastport, Salvage and Flat Island. Two of the three replacements were World War II ex-servicemen (see Appendix B.2(2)). In Point au Mal seven families left during the first year and returned to their homes in Placentia Bay. Replacements comprised two additional families arriving from Placentia Bay, the family of a settler's son, and a former



land settler from Red Island who had moved in 1936 to Brown's Arm.²

Buildings

Only slight variations in roof types and construction materials distinguished the single-storey wooden framed settler cottages built in the Small-Holding Settlements from those in the earlier land settlements. Floor plans were essentially the same. In Winterland cottages were square with pyramidal-type roofs. Settlers from Garnish used wooden shingles to finish the outside walls of the house, whereas settlers from Port Elizabeth used clap-boards. These basic modifications reflect differing traditional or cultural influences.

One of the most outstanding and uniform features of the landscape in Small-Holding Settlements was the type of barn approved by management and constructed by most settlers for the bonus of fifty dollars it brought, apart from the building materials which were provided by the settlement saw mills (see Fig. 6.2). The division of the internal space of the barns, that is, the floor plan, appears to have been left to the discretion of the individual settler who divided space in accordance with his own ideas of how livestock ought to be stabled, and feeds and farm implements stored.

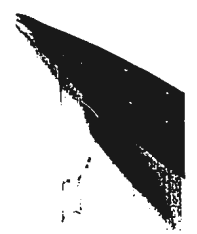
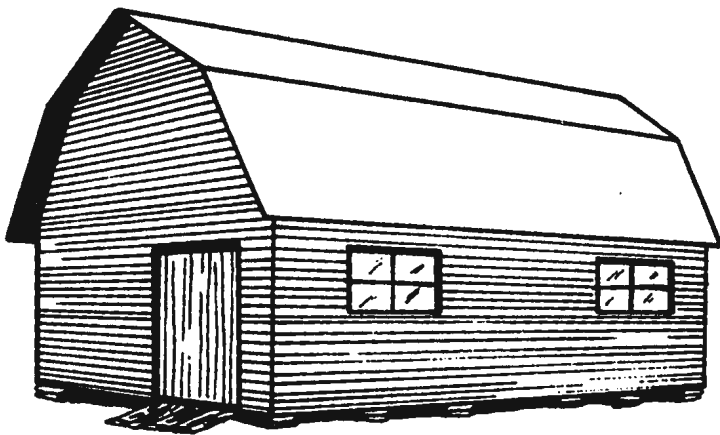


Figure 6.2

LAND SETTLEMENT BARN CONSTRUCTED UNDER
THREE YEAR PLAN



Other buildings for which settlers received cash bonuses to construct included root cellars and hen houses. Generally all buildings were grouped on the farmstead holding within easy reach of the dwelling. However, no established plan of arrangement appears to have been insisted upon or followed by the settlers, except for the general pattern of placing the out buildings behind and farther away from the road than the dwelling.

Official land surveys were conducted in the Small-Holding Settlements during the fall of 1939 before the first settlers arrived. Lots were given to individuals upon arrival and settlers were encouraged to fence their respective holdings during the first year. Horizontal rails nailed to vertical posts set in the ground represented the chief type of fencing (see e.g. Appendix A, March 19, 20, 25.)

Land Ownership Patterns

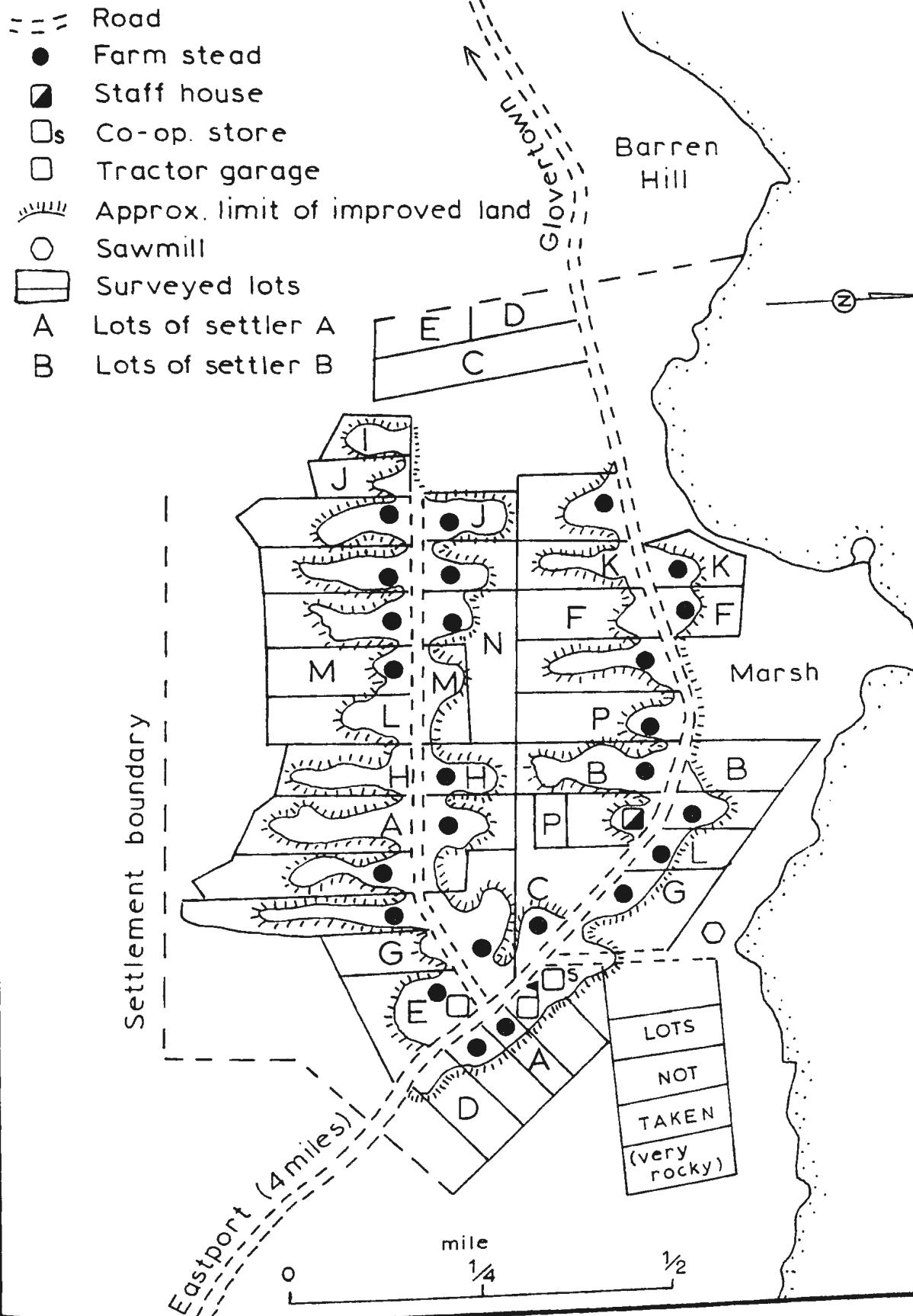
Though the official land survey had established the property lines of what were to be single holding units, of which eight acres were to be cleared and improved over a three year period, soil conditions and the practical aspects of reclamation were not known until the land clearing process was started. Sandringham was originally surveyed to accommodate 50 families; however, the number was limited to 25 families as a war-time economic measure and perhaps this was just as well for the settlement - for when 39 out of

the 50 surveyed lots were parcelled out to the settlers it was found difficult and in a few cases impossible to provide each family with holdings large enough to give eight units and some settlers were given an additional parcel separate from the farmstead holding. Figure 6.3 shows that the main group of settlers with two holdings were in close proximity to each other. In the case of settlers A, C, D, E, G and L, the distance between the farmstead and the additional holding was over one-half mile and for settlers C, D, and E distances ranged over a mile. The main road through Sandringham generally defined the poor rocky and difficult to reclaim land holdings from the better lots. As the line designating the approximate limits of land cleared by 1945 indicates, holdings on the north side of the road represent the poorer soils and rockier land.

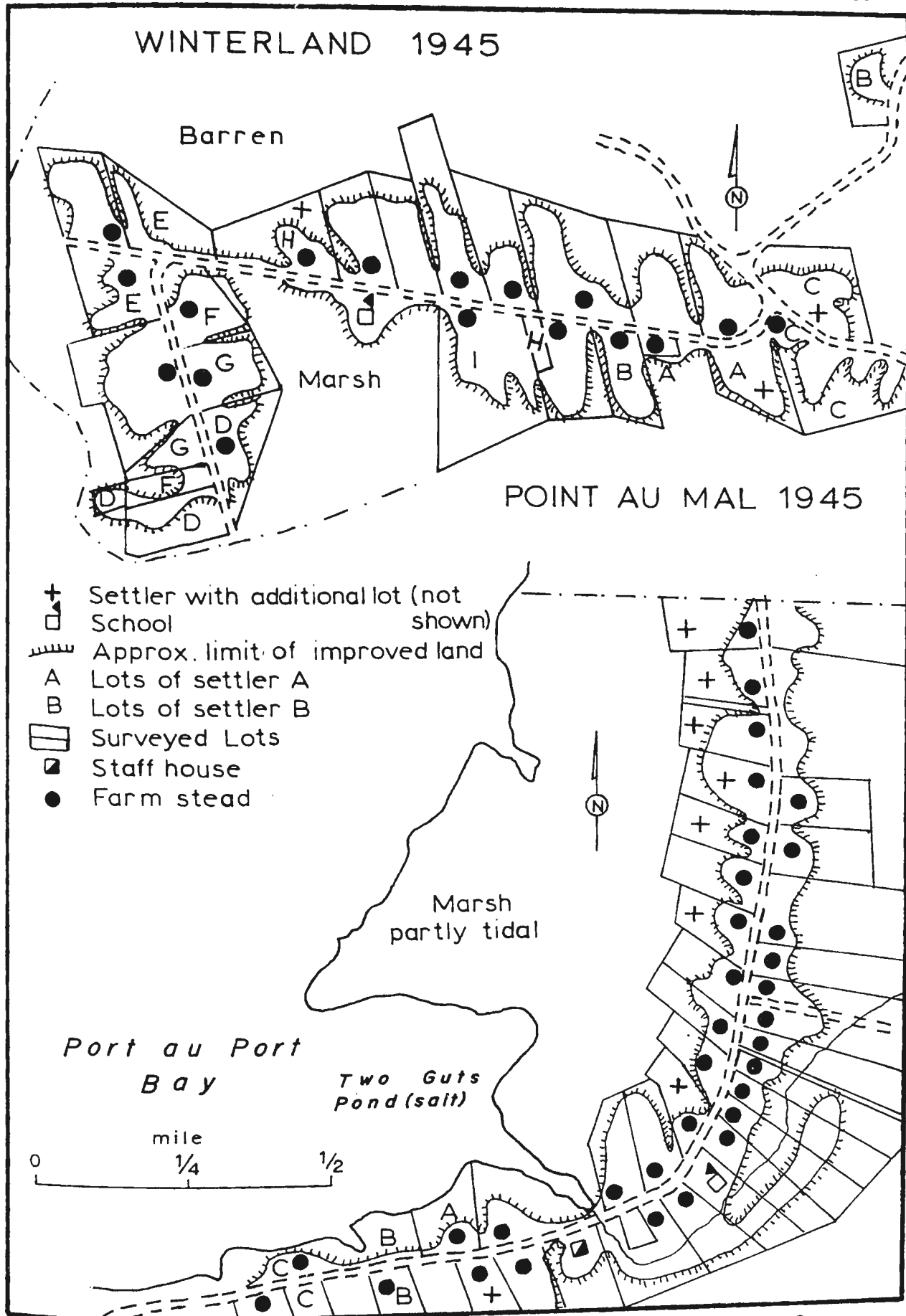
Local management measures to adjust holdings determined the pattern of original land ownership. Expedient adjustments similar to that detailed for Sandringham above also modified the land holding and ownership patterns in Winterland and Point au Mal, shown in Figure 6.4. Nevertheless a final result was that some settlers, though they received the larger acreages, still found themselves with useless farm land.

Figures 6.3 and 6.4 in showing the patterns of land ownership also indicate the pattern of settlement, for the

SANDRINGHAM SETTLEMENT 1945



SOURCE: CROWN LANDS SURVEY, FIELD RECONSTRUCTION 1969, AIR PHOTO INTERPRETATION



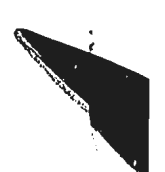
SOURCE: CROWN LANDS SURVEY FIELD RECONSTRUCTION 1969 AIR PHOTO INTERPRETATION.

latter is the former in combination. Sandringham is shown to be a relatively compact settlement where about half the dwellings and holdings were located back-to-back in an area enclosed by the main road and a settlement by-road.

Winterland and Point au Mal were essentially road-settlements with houses and holdings dispersed along both sides of a single access.

The establishment of field boundaries most of which were followed with fencing during the first year of occupancy helped to condition the patterns of land clearance and subsequent land use. Figures 6.3 and 6.4 show that elongated strips were cleared at perpendicular orientation to the road and staggered alternatively with tree and brush lines along field boundaries which formed wind breaks.

Government records indicate that at the end of 1942 the acreage cleared in Sandringham averaged 6.8 per settler; in Winterland 6.9 and in Point au Mal 4.9 (FOC/NA/106/1943a). There were obviously significant variations in settler clearances within settlements, as is shown by Figures 6.3 and 6.4, and these did not necessarily bear a close relationship to the total size of holdings, but accord largely with differing physical properties in the land and the industry of individuals in clearing their respective holdings.



Land Use and Agricultural Production 1945

Table 6.5 gives the per capita production of root crops and the numbers of livestock per family calculated from the 1945 census on a comparative settlement basis. It can be seen that Sandringham, two years removed from Government sponsorship, had emerged as a farming settlement where the emphasis was on the production of three main vegetable crops but with very little livestock. Winterland had developed balanced holdings based upon the production of livestock and root crops, and Point au Mal had become a settlement where livestock had assumed greatest importance in the agricultural economy.

Comparing the Small-Holding Settlements with each other and with the five previous land settlements, it can be seen that insofar as population dependency on farm production was concerned, Winterland and Sandringham fared much better than most of the other settlements. Since Markland production is not shown in either Table 6.5 or Table 4.8, it should be pointed out here that it ranked among the lowest in all items calculated on a per capita and per family basis for all eight land settlements.

Table 6.5 allows certain basic generalizations to be drawn concerning the differing pattern of adaptations made by the settlers which not only reflect modifications in what had been planned but also in response to variations in environmental conditions. Firstly the plan to provide

Table 6.5

Agricultural Production in Small-Holding Land Settlements

Item	1944-5	2	3*	4
Arable production per capita 1944	Sandringham	Winterland	Point au Mal	Highest unit value for other land settlements in Table 4.8
Potatoes, bushels	<u>61.5</u>	33.0	3.7	19.0 (Brown's Arm)
Turnips, bushels	<u>37.4</u>	<u>42.0</u>	0.3	1.3 (Midland)
Cabbage, lbs.	167.4	<u>353.0</u>	10.2	32.3 (Haricot)
Other roots, lbs.	0.4	0.8	0.2	0.3
Hay, tons	0.2	<u>1.5</u>	0.7	0.8 (Lourdes)
Livestock per family, 1945				
Cattle	0.3	2.9	1.6	<u>3.2</u> (Lourdes)
Horses	0.5	<u>1.2</u>	0.2	<u>0.5</u>
Swine	0.3	<u>0.6</u>	-	<u>1.3</u> (Brown's Arm)
Sheep	1.4	5.6	5.5	<u>6.4</u> (Lourdes)
Poultry	10.4	<u>15.3</u>	7.6	<u>13.2</u> (Brown's Arm)


Source: 1945 Newfoundland Census. Values underlined indicate highest production of all land settlements.

* includes Point au Mal non-land settlers approximately 6 families.

holdings on a 2:1 acreage ratio of grassland to arable was reversed at Sandringham, and reflects the poor quality of the sandy soils for pasture and hayland, hence the small numbers of livestock. In Winterland the soils were found to yield well both in hay and root crops. In Point au Mal the production of root crops was comparatively poor, probably partly as a result of the poor drainage conditions existent on most holdings. Here it was found more practical to gear farming toward the raising of livestock.

Evolution of Work Patterns

Except during the first year of the three year plan when land settlers were busily occupied in establishing their families in a new home, there was little to compel settlers to stay in the settlements. Settlers were free to seek job opportunities and alternative employment seasonally wherever they desired. Some Sandringham settlers established a pattern of going away to work after spring planting and returning during the late summer to harvest. During the remaining months of the fall, winter and spring labour was divided among additional land clearing, wood cutting, lumbering and preparing for next year's farming activities. A Sandringham settler described the sequence through which he became a full-time farmer: Over a three to four year period beginning in 1941 he gradually expanded his sown acreage and after planting acquired work as a carpenter



either in St. John's or Gander. At first his wife and two sons could manage the crops over the growing season as they had previously managed the kitchen garden in their former home while the head of the family was summer fishing on the Labrador coast. The farm work-load finally became too burdensome for the wife and sons to carry without extra labour, and a decision had to be taken either to reduce the cropped acreage, or for the head of the family to remain at home and add his labour to that of the other family members.

The above example does not represent a case in isolation but typifies the initial pattern followed by about 21 (84 per cent) of the Sandringham settlers though with some variations in the type of outside jobs taken (Table 8, Appendix C). While some settlers departed from the pattern of leaving the settlement in order to work the land, others apparently made the opposite decision either because they had poor lots or dependents who were of little assistance in working the land. The latter apparently weighed the advantages of cash employment greater than those to be gained from farming. Table 8, Appendix C shows that in 1955 12 settlers (48 per cent) perceived themselves to be farmers while 10 settlers (40 per cent) classified themselves as carpenters or labourers.

The evolution of work patterns among the land settlers in Winterland appears to have taken a different direction from that in Sandringham. Except in the summer of

1941 when most of the settlers spent a few months working on base construction at Argentia, there was little movement to take jobs outside the settlement. Informants suggested that occasionally some settlers sought winter work following a poor farming season, but that generally settlers stayed at home year round. Table 5.7 indicates that when Winterland settlers ceased to farm they migrated. Those who stayed in the settlement became in the main farmers while a few found employment in performing village functions such as the taximan, settler No. 13 - 1955, and the merchant, settler No. 2 - 1961 and 1966 (Table 9, Appendix C).

At Point au Mal settlers adapted to their new environment in quite a different manner from those at Winterland or Sandringham. Table 10, Appendix C shows that during the years immediately following the founding of the land settlement some 29 settlers (86 per cent) worked on the USAF base at Stephenville. At least 8 settlers (23 per cent) found a job in some other year in a limestone quarry at Aguathuna. The occupational classification for 1955 in Table 10, Appendix C indicates the general type of work that settlers were probably doing during the period 1941-1945 as well. In 1955 19 out of the 27 settlers still at Point au Mal were classified as carpenters or labourers. Though it is uncertain whether or not the settlers were engaging in casual farming and fishing operations, it is interesting that no settler perceived himself to be a farmer or a fisherman.

Point au Mal appears to have become very quickly a dormitory village with a very weak local economy.

Services

Co-operative societies in the Small-Holding Settlements had each collapsed by 1946. Those in Winterland and Sandringham were never registered but this did not assist or retard their coming to grief. Reasons for their failure are generally those which caused the other land settlement societies to fail - that is, poor management, and a lack of education among the settlers. In some instances poor business speculation hastened bankruptcy as is shown in the following report made for the Sandringham Co-operative in 1945.

One purchase of fertilizer from an agent left the society responsible for the transportation of the fertilizer from Port aux Basques to Sandringham and involved the society in a heavy loss (FOC/NA/162/1945)

Members of the society have withdrawn a sum of \$762.03 in excess of the amounts they paid in. Some of these withdrawals represent dividends which ought never to have been declared and from 1943 onwards had not been earned (FOC/NA/162/1945).

Invariably there was always one or two settlers, or sons of settlers, who emerged as the village storekeepers - starting very small and gradually expanding, sometimes financed by a larger merchant elsewhere.


Schools in the Small-Holding Settlements followed after the denominational pattern and were operated by the

designated churches. School buildings functioned as class rooms, chapel and settlement meeting hall. The first Anglican Church in Sandringham was opened in 1961; the first church in Winterland, a United Church in 1968. With the present rapidly declining population of Point au Mal it seems doubtful whether the settlement will survive long enough to raise its first religious edifice.

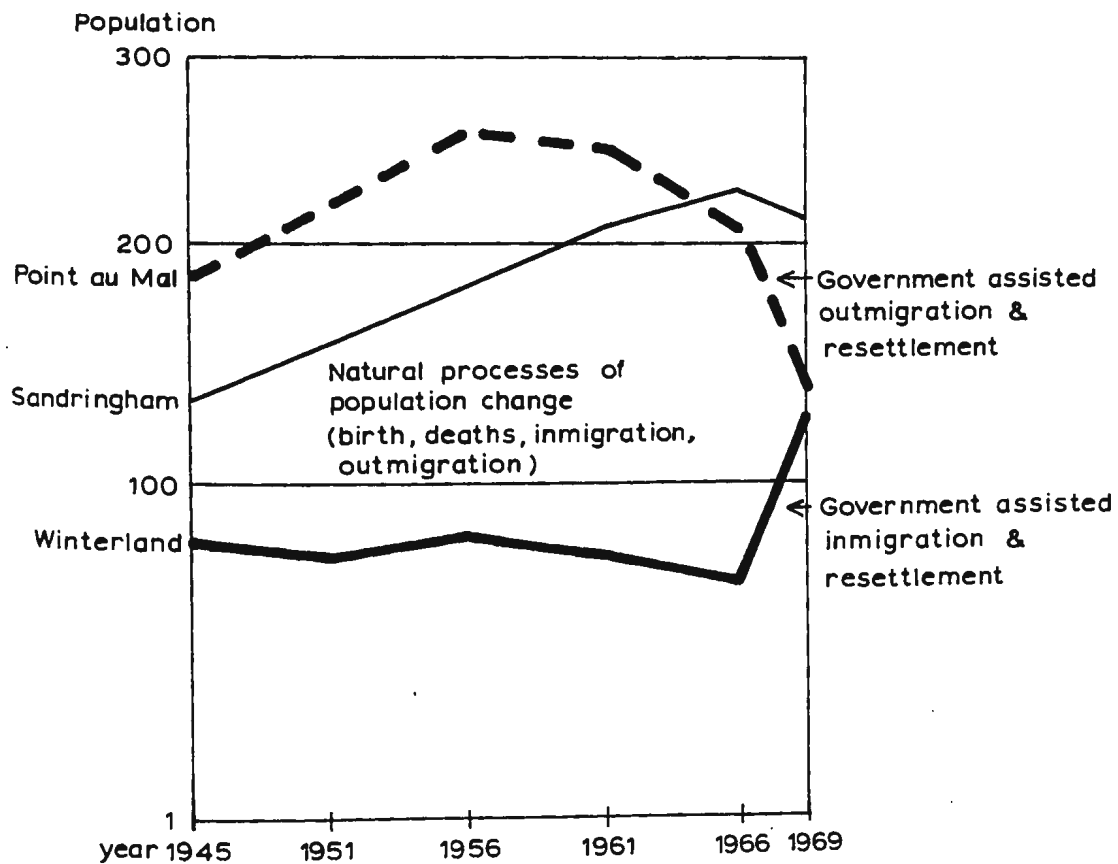
B. Changing Population and Landscape Structure 1945-1969

Population Changes

Figure 6.5 provides an indication of the total population in each Small-Holding settlement at various periods between 1945 and 1969. The slope of the graphs is drawn on a logarithmic scale and thus shows the rate of population change as well as the absolute change. The most rapid population changes, as the steepness of the graphs indicates, have been since 1966, particularly in Point au Mal and Winterland where, in the former, government assistance has been applied in encouraging families to relocate in Port au Port and Stephenville, and in the latter, where the same program operating on another part of the island has almost doubled this settlement's population within three years. The Sandringham settlement has expanded since 1945 at a relatively even rate of population growth. The slight population decline indicated here for 1966-1969 appears to have



Rates of population change in small holding settlements 1945-1969 (logarithmic scale)



Source 1945 Newfoundland Census
 1951 - 66 Census of Canada
 1969 Field Research

been a short-term fluctuation, for since initial field work was conducted in this settlement, at least two new families have established there on their own initiative and several new homes have been started by young and recently married descendants of farmer land settlers.

The process of household replacement of families who have either died or moved elsewhere by the establishment of a second generation within the settlements has continued from 1945 to the present. Table 6.6 shows that the 1969 occupants of each small-holding settlement are very largely descended from the first generation of land owners, that is, sons and other kin to the 1945 settlers. In Sandringham almost one-half of the present householders (47.5 per cent) are sons of land settlers. In Winterland (23.6 per cent) and Point au Mal (26.1 per cent) land settlers' sons form about one-quarter of the householder occupants. Table 6.6

Table 6.6

A Classification of Present Householders in
Small-Holding Settlements in Relation to
Land Settler Occupants in 1945

Relationship to 1945 settlers	Sandringham		Winterland		Point au Mal	
	No	%	No	%	No	%
Land settlers	11	27.5	10	29.4	8	34.8
Sons	19	47.5	8	23.6	6	26.1
Other related	4	10.0	6	17.6	2	8.7
Unrelated	6	15.0	10	29.4	7	30.4
Total	40	100.0	34	100.0	23	100.0

shows some other interesting comparisons and contrasts. Original land settlers form the same approximate proportion and number of householders in both Sandringham and Winterland. In Point au Mal original settlers are fewer in number than in the other two settlements, but are proportionately a larger part of total settlement (34.8 per cent, as compared with 27.5 per cent in Sandringham and 29.4 per cent in Winterland). It would thus appear that original settlers in Point au Mal, most of whom are now old-age pensioners and relatively secure financially, are less willing to resettle under the present government resettlement program than the younger middle-aged families, that is, their sons' families. Families "unrelated to original land settlers" form another interesting component in settler replacement, for except in Sandringham, these are larger in number than sons of settlers and householders of other land settler kinship. The unrelated householder component (15 per cent) in Sandringham consists of families who from time to time have acquired land and most often a vacant house on their own initiative, or who, as in two cases, have been families on welfare from elsewhere placed in vacant dwellings secured for them by officials of the Department of Welfare. In Point au Mal and Winterland the unrelated householder components are of two entirely different origins. In the former they consist of persons descended from the pre-land settlement community, whereas in the latter they represent

the families recently resettled by government. For the most part, householders classed as "other related to 1945 settlers" are sons-in-law of original settlers who have dwellings constructed most often on the homestead, or land near the paternal homes of their wives.

Characteristics of the 1969 Population

Selective outmigration by school grade-level attainment has followed the same pattern in Small-Holding Settlements as that detailed for the other five land settlements, that is, students who have attained the higher grade levels (IX to XI) tend to leave the settlement permanently, whereas those who leave school with lower grades tend to stay, some remaining long enough to marry, build a home and settle. In the period 1964-1969, nine students (four males) completed grades between IX and XI in Sandringham and all left; four sought post-secondary training and the others took jobs in other parts of Newfoundland. In Winterland six students completed Grade IX-XI in some period, and three (50 per cent) migrated. Four students (two males) who failed to achieve beyond Grade VIII were in 1969 resident in Winterland and the two males in this group had formed farming-partnerships with their fathers. Three out of five students achieving beyond Grade VIII in Point au Mal 1964-1969 had left the settlement by 1969 whereas all eight (five males) who left school with

Table 6.7

Age-grade Level of Students Attending School
in Small-Holding Land Settlements, 1969

	Sandringham		Winterland		Point au Mal	
	No.	%	No	%	No	%
Above age-grade norm	-	0	5	19	6	16
In age-grade norm	35	61	19	73	21	53
1 age-grade below norm	14		2		8	
2 age-grades below norm	6	39	-	8	3	31
3 age-grades below norm	2		-		1	
Total, attending school	57	100	26	100	39	100

Grade VIII or less were residing at home.

If past trends of population replacement and migration continue into the future, Sandringham and Point au Mal each have a high potential for population growth. Table 6.7 shows that 39 per cent of the children presently at school in Sandringham, and 31 per cent of the children in Point au Mal range from 1 to 3 age-grade levels below the normal, whereas in Winterland only two students (8 per cent) have failed to stay within the age-grade structure of schooling progress. On the other hand additional disruptive influences such as government assisted migrations are likely to change the pattern of replacement in Point au Mal by pressures that will force families with children attending school to move into nearby centres. Unless the system of education is altered or improved in the new settlement, this merely shifts the potential replacement of population to the resettlement reception centre. In the Point au Mal example families moving into Port au Port, for instance, will have to send their children to the same school system which they presently attend, commuting daily by school bus 9 miles from home.

With respect to the age-sex characteristics of the populations, Table 6.8 shows the present distribution of persons in five-year cohorts and by percentage for age-groups 0-19, 20-44, 45-64 and 65 and over. In the three communities the males outnumber females and this feature is

particularly striking in Sandringham where males in age-group 0-9 are almost double the number of females, and age-group 30-34 in which males outnumber females 11 to 4. Several other anomalous features of the age-sex groups appear in Winterland where females 15-19 years outnumber males 10 to 4, and in Point au Mal where in the same category males outnumber females 10 to 7. These disparities are rather difficult to explain, and could only be attempted from a case study of individuals rather than from broad generalizations, for the total numbers in each group are relatively small. For instance, some of the females in the age-group 15-19 in Winterland are married; a few others are attending school, several have completed school and are presently commuting to work in the Marystown area and at least two have left school but remain unemployed at home. On the other hand six (60 per cent) of the males enumerated in age-group 15-19 in Point au Mal consists of school leavers who remain at home among the ranks of the unemployed, and the remainder (40 per cent) are still in school.

Generally, each community contains the features of progressive populations, according to the percentage distribution of persons in the various age-groups. More than 40 per cent of the population in each community ranges between 0 and 19 years, forming what is generally considered the dependent component of a population. In relation to the distribution of persons in other age-groups, the dependent

Table 6.8

Age-sex Structure of Populations in
Small-Holding Land Settlements, 1969

Number in Age-group	Sandringham			Winterland			Point au Mal		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	15	8	23	10	8	18	11	13	24
5-9	20	10	30	8	5	13	12	11	23
10-14	14	15	29	5	4	9	8	9	17
15-19	8	10	18	4	10	14	10	7	17
20-24	6	8	14	7	6	13	4	1	5
25-29	5	8	13	6	5	11	-	4	4
30-34	11	4	15	2	2	4	-	3	3
35-39	6	8	14	5	2	7	3	2	5
40-44	5	3	8	4	4	8	4	3	7
45-49	7	4	11	2	1	3	-	2	2
50-54	5	4	9	2	3	5	5	-	5
55-59	-	3	3	4	4	8	-	1	1
60-64	3	3	6	1	1	2	2	2	4
65 over	8	5	13	6	4	10	7	4	11
Total number	113	93	206	66	59	125	66	62	128
Total Percentage in Age-group	Sandringham			Winterland			Point au Mal		
0-19	48.6			43.2			63.2		
20-44	31.0			34.4			18.8		
45-64	14.1			14.4			9.4		
65 over	6.3			8.0			8.6		
	100.0			100.0			100.0		

Source: Field Enquiry, 1969.

component (63.2 per cent) is far larger proportionately in Point au Mal to the adult, or working age, population (28.2 per cent) than in either Sandringham or Winterland (Table 6.8). Indeed the absence of males in age-groups 25-29, 30-34, 45-49, 55-59, in the Point au Mal population forms an interesting distortion in the distribution of the population by age as a whole. Apart from the fact that the average household size is larger in Point au Mal (5.2) than in Sandringham (5.1) or Winterland (3.7), (Table 2, Appendix C), the relative difference in distribution by age groups appears to be affected by the present resettlement scheme. It has been seen previously that of those persons choosing to move, there has been a greater propensity to resettle among the younger families than the elderly. An apparent corollary to this is that among the younger families, there has been even greater propensity to move among families having the lesser number of dependants.

As previously mentioned, each of the three Small-Holding Settlements designated a denominational criterion for family selection: Church of England (Anglican) for Sandringham, United Church for Winterland, and Roman Catholic for Point au Mal. Table 6.9 shows that the denominational structure of these settlements for 1969 continues basically unchanged, and that the main population increases and decreases have for the most part affected the originally

Table 6.9

Denominational Structure of Small-Holding Land Settlements, 1969

	Sandringham		Winterland		Point au Mal	
	No.	Change	No.	Change	No.	Change
	1969	from 1945	1969	from 1945	1969	from 1945
Roman Catholic	1	- 1	-	-	128	- 58
Anglican	202	+82	4	-18	-	-
United Church	1	- 7	105	+63	-	-
Salvation Army	1	+ 1	-	-14	-	-
Pentecostal	-	-	16	+16	-	-
Other	1	0	-	- 1	-	-
	<hr/>		<hr/>		<hr/>	
	206		125		128	

designated denominations. The population increase in Sandringham has swelled the number of Anglican, whereas the population decline in Point au Mal has reduced the number of Roman Catholics. Winterland presents a slightly more complex picture. The minor denominational groups in 1945, that is, Anglicans and Salvation Army affiliates have declined in number. Immigration through resettlement has increased United Church membership and added in the process 16 Pentecostal affiliates.

Table 6.10 provides some basic data on the employment status of the labour force of working age in the Small-Holding Settlements for 1969. Excluding housewives and widows, the ratio of persons employed to those unemployed can be taken as an index of economic health for each settlement. At the time of the field enquiry, the ratio of employed to unemployed were as follows: Sandringham 2:1, Winterland 9:2.1, Point au Mal 1:4.2 (See Table 6.10). Comparatively, the Winterland settlement showed an excellent work status rating; Sandringham, a relatively poor work status; Point au Mal, economic depression. In relation to the number of household units in each settlement the ratio of employed persons to household units rate as follows: Sandringham 1:1, Winterland 1.08:1, and Point au Mal 1.3:8. This index shows Sandringham in a slightly more favorable employment work status, for there was at least one person

Table 6.10

Employment Status of Labour Force in Small-Holding Land Settlements, 1969

		Sandringham		Winterland No. of persons		Point au Mal	
1	Work Status						
	(a) employed	40		37		6	
	in wage work	28		26		3	
	self-employed	12		11		3	
	(b) unemployed	20		4		25	
	able-bodied	18		2		18	
	disabled	2		2		7	
	(c) housewives/widows	40		29		14	
	(d) pensioners	13		10		10	
2	Place of Employment		% of employed		% of employed		% of employed
	(a) at home	14	35	16	43	3	50
	(b) elsewhere	26	65	21	57	3	50
	i. Commuting distance						
	1-25 miles	9	22.5	19	51.6	2	33.3
	26-50 miles	5	12.5	-		-	
	51-75 miles	-		-		-	
	75 miles over	12	30.0	2	5.4	1	16.7
	ii. Commuting frequency						
	daily	12	30.0	19	51.6	1	16.7
	2-7 days	8	20.0	-		1	16.7
	Over 7 days	6	15.0	2	5.4	1	16.7

employed for each dwelling occupied, and this suggests that unemployment in this settlement affects mostly members of household units of which there was at least one member working, and that the variation between the two indices for Winterland and Sandringham is primarily a function of the larger number of persons per household (5.1) in the latter as opposed to 3.7 persons per household in the former. The actual number of household units having no persons employed in Sandringham was seven (17.5 per cent). However, at least four of these had household income from old age pensions and disability pensions, leaving three household units (7.5 per cent) dependent on able-bodied public welfare; in fact two of these householders were placed in the settlement by the Department of Welfare. Whatever the index used for Point au Mal, the result indicates economic depression and rural poverty. One persons was employed for each 3.8 household units, and ten household units (43.5 per cent) had no source of regular cash income apart from able-bodied public assistance and child family allowances.

Table 6.10 also shows the place of work of the actively engaged. In each settlement at least one-half of the active force were commuting to jobs outside the settlement. It will be recalled that at any early date after founding, land settlers in Point au Mal and Sandringham developed a pattern of leaving the settlement for work outside but that the emphasis on outside employment was

greater in Point au Mal than Sandringham where some families established their economic foundation upon farm income. Winterland by contrast was in 1945 almost entirely a settlement based upon local land resources. Table 6.10 shows that Sandringham retains basically the same type of "place of work" patterns and that Winterland has evolved in a direction similar to Sandringham. Almost two-thirds (65 per cent) of the active labour force in Sandringham, and more than one-half (57 per cent) of the active workers in Winterland, were working away from home. In relative terms, however, both these settlements still demonstrate that the local economy is still a very important factor for a large proportion of their populations. The small numbers of people working both in Point au Mal and elsewhere show that the settlement has both a very weak local economy and few job opportunities within any reasonable commuting distance of the settlement. The present depression in Point au Mal is very largely the result of regional depression in the Port au Port area generally. Resettlement of families to Stephenville or Port au Port is unlikely to improve the economic position of families in Point au Mal, for there are no wage work opportunities in the centres that could not be taken by the unemployed persons in Point au Mal presently.

Almost all of the commuting labour force in Winterland work in the Burin Bay Arm-Marystown area about seven miles distant, travelling to and from work daily.

Winterland commuters are also mainly persons of families recently resettled in the settlement. The active commuting labour force in Sandringham tends to range over a greater distance from home and travel on a wider time frequency than any of the other land settlements. Located at a distance of six miles from the Trans-Canada Highway at a road junction within Terra Nova National Park, Sandringham is less than 50 miles from Gander, and less than 200 miles from St. John's. The Park employs a few Sandringham workers permanently and a larger number seasonally. Some workers commute to Gander daily; others commute to Gander, and St. John's as well as other centres weekly (Table 6.10). An interesting feature of commuting from all three settlements is that all persons enumerated in Table 6.10 under "commuting frequency over 7 days" were working at Churchill Falls, Labrador, (6 from Sandringham, 2 from Winterland and 1 from Point au Mal).

Table 6.11 indicates the types of work in which the active labour forces of Sandringham, Winterland and Point au Mal were employed during the summer of 1969. In relation to the place of employment, those working at home in both Sandringham and Winterland were primarily farmers. Services engaged some persons both locally and away, particularly in Winterland where ten out of the twelve employed in various service industries worked in the Marystown-Burin area. In Sandringham 15 persons (37.5 per cent) were working in

Table 6.11

Occupation Composition of Active Labour Force in
Small-Holding Settlements, 1969

	Sandringham	Winterland	Point au Mal
Professional, technical	-	2	-
Managerial, administrative	1	2	-
Services	9	12	1
Transport	1	1	-
Fishing, related work	4	1	2
Farming	7	11	-
Labouring	3	2	-
Main. Constr. Carp.	15	6	2
Other	-	-	1
Total	40	37	6
Percentage farming	17.5	29.7	0.0

Source: Field Enquiry, 1969.

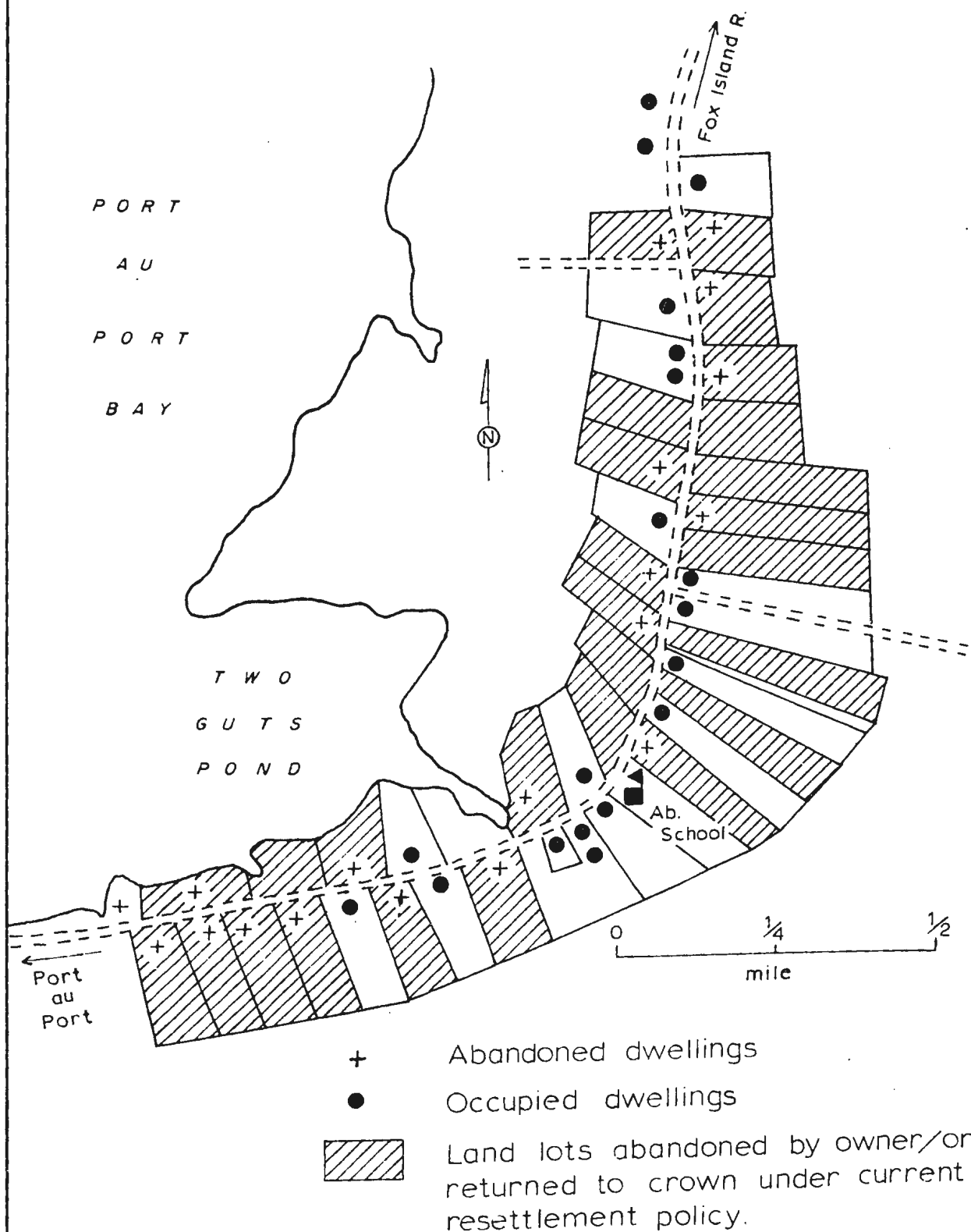
maintenance, construction and carpentry work, mostly away. Seven farmers in Sandringham and eleven in Winterland represented 17.5 per cent and 29.7 per cent of the active work force in each settlement respectively (Table 6.11). Although this indicates the relative importance of farming in terms of the commercial farmers in each settlement, the total importance of local agriculture is somewhat disguised. Table 5, Appendix C shows that 70 per cent of the householders in Sandringham engage in some farming actively and that 35 per cent market some produce. Similarly some 12 (36 per cent) Winterland householders produce farm products and 10 (30 per cent) derived some cash income from sales. Even in Point au Mal some 12 householders (37 per cent) grow either small amounts of vegetables or keep a few livestock. As was exemplified in the previous chapter particularly in the example of Brown's Arm, a number of elderly persons who are classified as old-age pensioners often engage in farming activity to supplement both their food needs and cash income. Among the eight males shown to be "65 years or over" for Sandringham in Table 6.8, there are five who continue farming beyond retirement, mostly in partnership with sons who have assumed major control over the land and farming activities. All six of the old age male pensioners in Winterland are farming in their retirement.

As far as the younger generations are concerned farming has become primarily the work of men. Although some of the older women, like their husbands, still assist with planting, weeding and harvesting, few of the younger women engage in field work but may help with chores that do not put them on public exhibition. Similarly social changes and new value orientations give farm children more freedom and less chores than formerly and today their participation in farm work forms more an aspect of leisurely recreation, or of promised and immediate financial rewards than of paternal discipline or entrusted responsibilities in contributing to family support.

Land Abandonment in Point au Mal

The effect of household migrations from Point au Mal during the past few years is well documented on the landscape of the settlement. During July 1969 there were more dwellings abandoned than occupied, even despite the fact that some families moving to Port au Port had "launched" their homes with them. Most of the abandoned dwellings consist of large two-storey structures and appear to have been, until vacated, well-kept living units, reflecting more prosperous times for the settlement when job opportunities were easy to acquire at the Harmon Air Force Base in Stephenville. Few of the original land settler cottages survive and oddly enough, most that do are inhabited by the larger and poorer families who remain behind.

LAND ABANDONED IN POINT AU MAL 1969



Along with the vacated dwellings and associated out-buildings, most of the land holdings granted under the Land Development Act have been returned to the Crown. A provision of the population centralization scheme operating in Newfoundland presently is that householders who accept a government grant to resettle must forfeit title and deed to land properties in their former homes. This process of abandonment along with absenteeism has resulted in a decline of 64 per cent in acreage of the land granted under the LDA (1945). Figure 6.6 shows the distribution of original lots both abandoned and presently under local tenure in Point au Mal. Altogether 28 lots lie abandoned and dispersed among slightly more than half the number presently occupied.

Land Expansion and Agricultural Development in Sandringham and Winterland

Table 1 in Appendix C shows that the total area allotted to small holders in Sandringham and Winterland initially amounted to 283 acres and 315 acres respectively. By 1969 the total acreage under resident tenure had increased by 42 per cent in Sandringham and by 32 per cent in Winterland. These expansions include land held by absentee owners, which in Sandringham consisted of two land lots, or 5 per cent of the total acreage, and in Winterland ten land lots, or about 10 per cent of the total acreage.

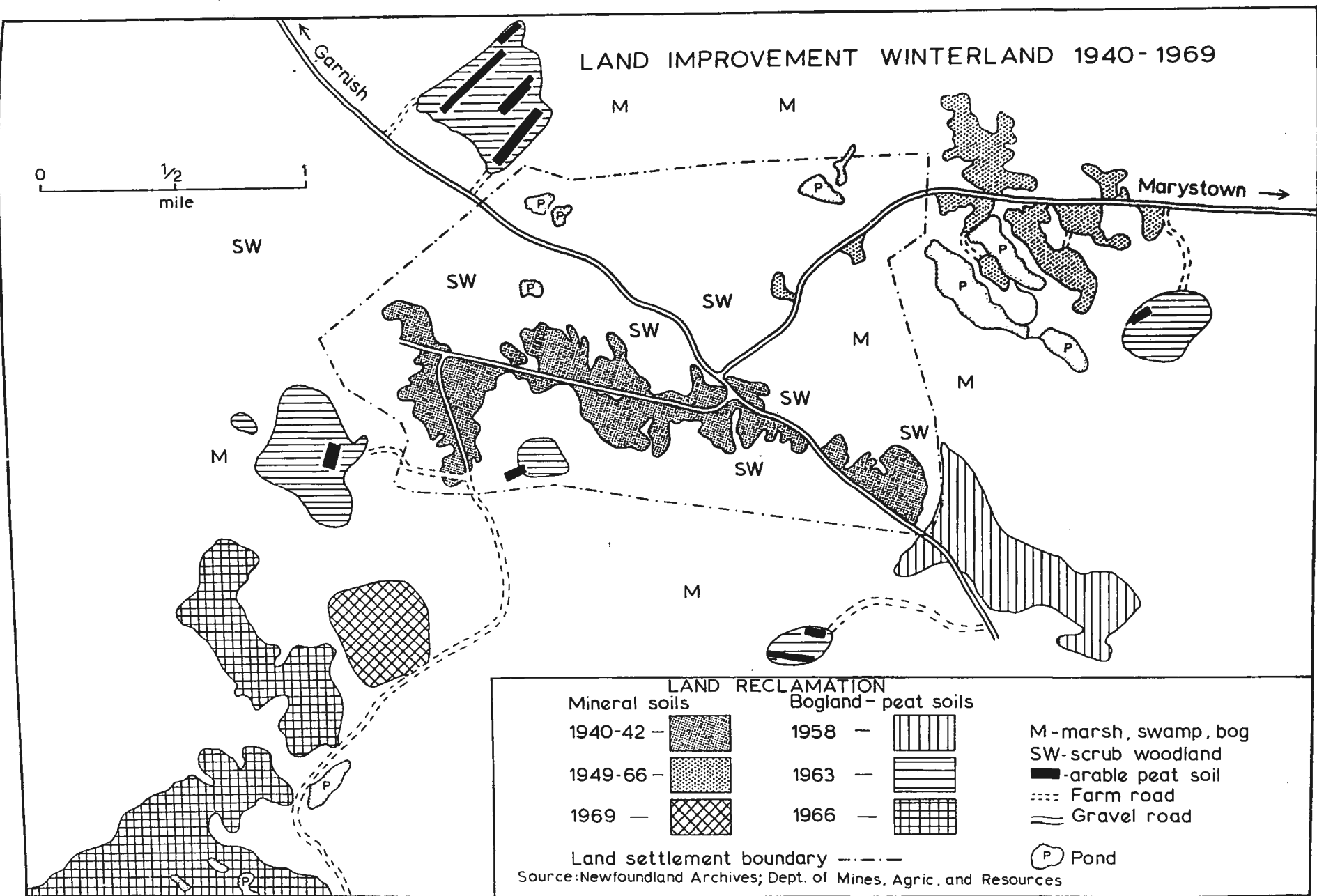


Figure 6.7

The process of acquiring new land parcels represent the efforts of farming families in these two settlements to expand their improved land, increase the volume of farm produce, and increase farm income. At the end of direct government sponsorship in 1942 the total improved acreage in Sandringham and Winterland stood at 170 and 160 acres respectively. Government records in the Department of Mines, Agriculture and Resources show that since that time Sandringham farmers have reclaimed an additional 50-60 acres on lands granted under the L.D.A. (1944) and on land lots leased or granted in the sequel. Similarly Winterland farmers have improved an additional 50-60 acres mostly in privately acquired outfield land lots beyond the original land settlement limits. Besides land improved on by individual initiative which in the case of both settlements has taken up practically all of the available mineral soils within relatively easy access, the present Government has within the last decade attempted to encourage expansion of farming activities into boglands, and has reclaimed some peat soils in the general area of both Winterland and Sandringham.

Figure 6.7 shows the progression of land improvement in the Winterland area from 1940 to 1969, that is, from the origins of the land settlement scheme to the present. After 1942 Winterland settlers moved outside the land settlement

limits and established land clearances along the Marystown road. Crown Lands records show that land leases for farming were first issued in this area in 1949. Some land lots were acquired by the original land settler; some in their sons' names. In 1958 the Newfoundland Government reclaimed about 100 acres of bogland along the south-western perimeter of the settlement and tried to encourage farmers to utilize the land both for root crops and hayland. This experiment was rather unsuccessful, because farmers were dissatisfied with tenure arrangements and the fact that government equipment was removed. Drainage ditches were not maintained and the land fell into disuse. The experiment did prove that both hay and certain root crops yielded relatively well, and in 1966 additional bogland drainage and reclamation was begun by government for individuals. Five different areas were improved and leased to individual farmers conditional to their continued maintenance and use. About one mile south of the settlement, further Government activity has included the transformation of about 200 acres of bogland and marginal mineral soils into pasture land (Figure 6.7).³ During the summer of 1969, four separate areas were used to pasture slightly more than 100 head of cattle belonging mostly to Winterland residents. These "community pastures" are operated by the Government and cattle owners are charged a fee of \$5.00 per grazing season (May 1-October 31) for each animal over 9 months old, \$2.50 for young weaned

animals while sucklings are carried free. The pastures are managed by two paid attendants, and are not necessarily for the exclusive use of Winterland residents. In 1969 about one-half the cattle herd on the pastures came from Winterland, while the remainder belonged to residents of Grand Bank, Garnish, Marystown, Fortune, Burin, Mooring Cove and Lewin's Cove.⁶

Figure 6.8 shows that in Sandringham the initial expansions of improved land after 1942 were undertaken mostly on the original holdings and within the designated land settlement limits. By 1956, however, the area of improved land was extended onto accessible lands along the road to the west. Some holdings here were held through grants issued before the land settlement began but by persons who had never lived on or developed them. These lands were purchased by Sandringham farmers and some additional land held by the Crown was leased, fenced and cleared for cultivation of root crops. Further physical expansion of cultivable mineral soils is practically impossible due to terrain limitations, and the extreme costs involved in reclamation and development of lands which are more marginal for production than those presently in use. Williams recommended that the problem of land hunger in Sandringham might be partly solved by turning over unused or under-used land lots to the more efficient farmers at nominal rents (Williams, 1963:100).

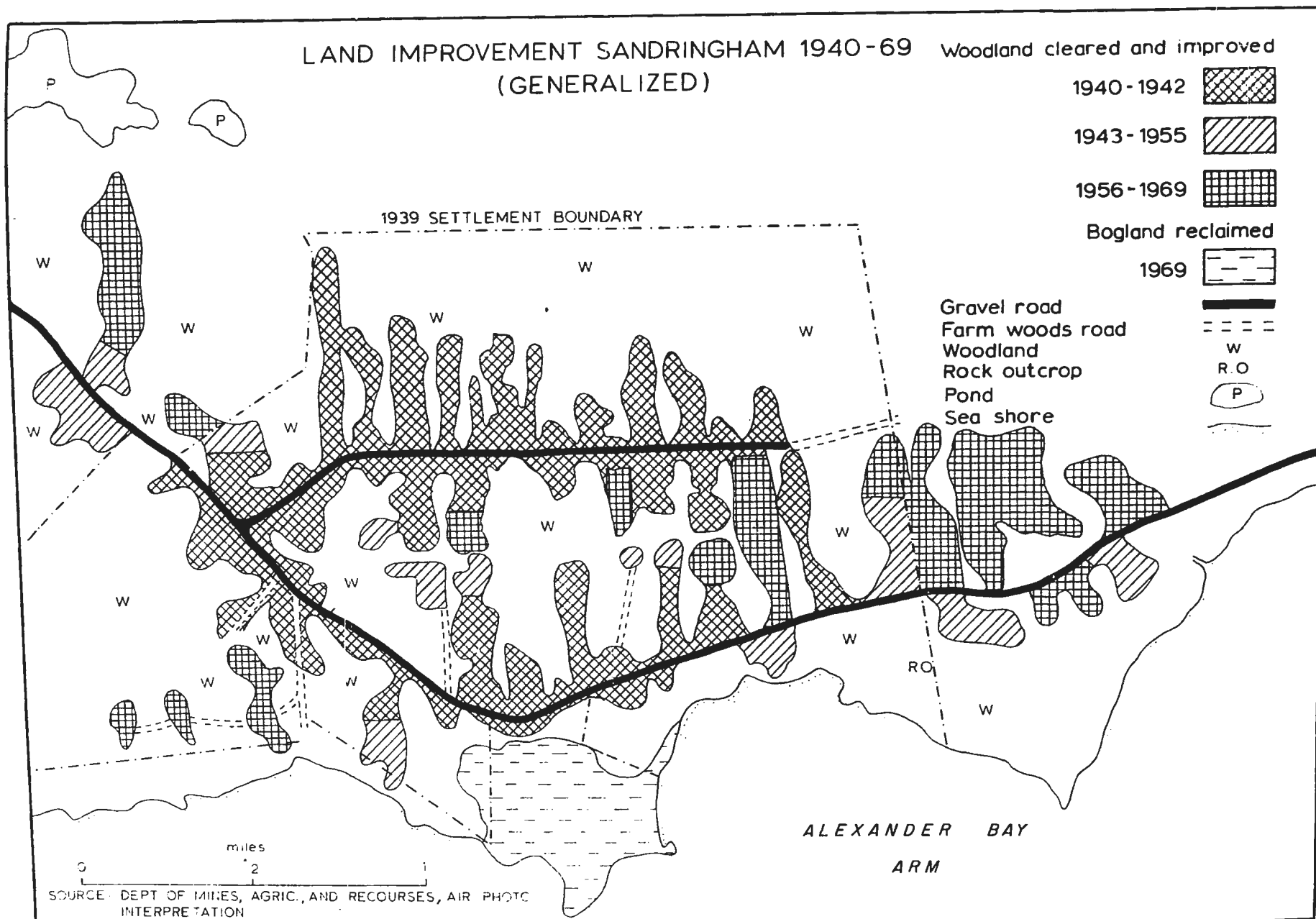


Figure 6.8

During the past few years Sandringham like Winterland has succeeded in attracting the attention of Government and various efforts have been made to assist the farmers in developing a stronger economic basis in their operations. Incentives for agricultural development in Sandringham are closely linked with rural redevelopments operating under an A.R.D.A. scheme for all seven communities on the Eastport Peninsula, namely Sandringham, Eastport, Happy Adventure, Sandy Cove, Salvage, Burnside and St. Chad's, and affecting fishing and tourism as well as farming.

Two solutions to the problem of land shortage in Sandringham have been attempted thus far. The first is the construction of green houses by farmers who desire to expand and who have been encouraged by government financial assistance on an individual-government 50-50 shared cost basis. The second solution parallels the Winterland example, that is, the reclamation of bogland. Unlike the landscape surrounding Winterland, Sandringham has few peat bogs within easy access that could be developed. Ten acres of bogland within the settlement were ditched and de-vegetated during late 1969, but still await some tenure arrangements and also their first cropping. Another bogland-peat soil project which has produced some results is an inter-community development some ten miles from Sandringham, located on the northern perimeter of Terra Nova

National Park and accessible from the Trans-Canada Highway near Spencer Bridge. In 1969 approximately 30 acres of land were under hay cultivation to provide winter forage for livestock kept by families on the Eastport Peninsula, including Sandringham.⁵ These recent innovations in agriculture have not been in existence long enough to assess their success. Green-houses producing tomatoes for the St. John's market are expected to add \$1000-\$1500 to the net farm income of Sandringham producers. Hay produced on boglands may encourage the keeping of more livestock since this reduces the need to purchase winter feed as hithertofore; however, this settlement still lacks summer pasture, having lost the use of woodland grazing in the Terra Nova National Park. The traditional practice of allowing livestock summer grazing in all unfenced areas and along the public roadsides is becoming more problematic due to the increased volume of traffic, and an increasingly averse public attitude toward such practices. The fact that both Winterland and Sandringham now share with neighbouring settlements common agricultural use of peat bogs emphasizes the development of settlement economic interlinkage previously non-existent.

Changing Patterns of Land Tenure

Increases in the number of dwellings in any settlement quite apart from agricultural developments create

pressures that lead either to subdivision, the splitting up of occupied holdings or to expansion of settlement unto lands previously unoccupied. Apart from one dwelling in Sandringham which was constructed about 1945 all of the present householders in both Sandringham and Winterland are spaced along road frontages and inside the boundaries established for land settlement in 1939. Thus settlement in terms of nearest neighbours have increased in density in both communities.

Whereas the main increases in dwelling units have resulted from the establishment of householders who engage in little or no agricultural activity and have little need for land units larger than those required for their dwellings, some farming families established the pattern of acquiring more land parcels and larger acreages. The latter has resulted in a process of expansion whereas the former have effected a process of road frontage subdivision. Unlike settlements such as Midland where few of the original lots have any appreciable cultivation, there has not been any example of subdivision or fragmentation of good farm land lots in either Sandringham or Winterland.

The net result of the population changes and the changing economic composition of the resident populations is that far greater disparities have accrued in the pattern of land tenure than when each settlement began. Table 6.12 demonstrates the changed relationship between householders

Table 6.12

Number and Size of Land Holdings in Winterland
and Sandringham 1945 and 1969

Land Class Size (acres)	Number of Householders occupying					
	Winterland		Change + or -	Sandringham		Change + or -
	1945	1969		1945	1969	
Less than 1 acre	-	14	+ 14	-	16	+ 16
1-9.9 acres	10	2	- 8	10	10	+ 0
10-24.9 acres	6	10	+ 4	13	10	- 3
25-49.9 acres	1	7	+ 6	2	2	0
50 acres over	-	-		-	2	+ 2
Total householders	17	33		25	40	
Separate Land Parcels						
One land parcel	8	19	+ 11	11	26	+ 15
Two land parcels	5	5	0	14	8	- 6
Three land parcels	4	5	+ 1	-	3	+ 3
Four land parcels	-	3	+ 3	-	2	+ 2
Five land parcels or over	-	1	+ 1	-	1	+ 1
	17	33		25	40	

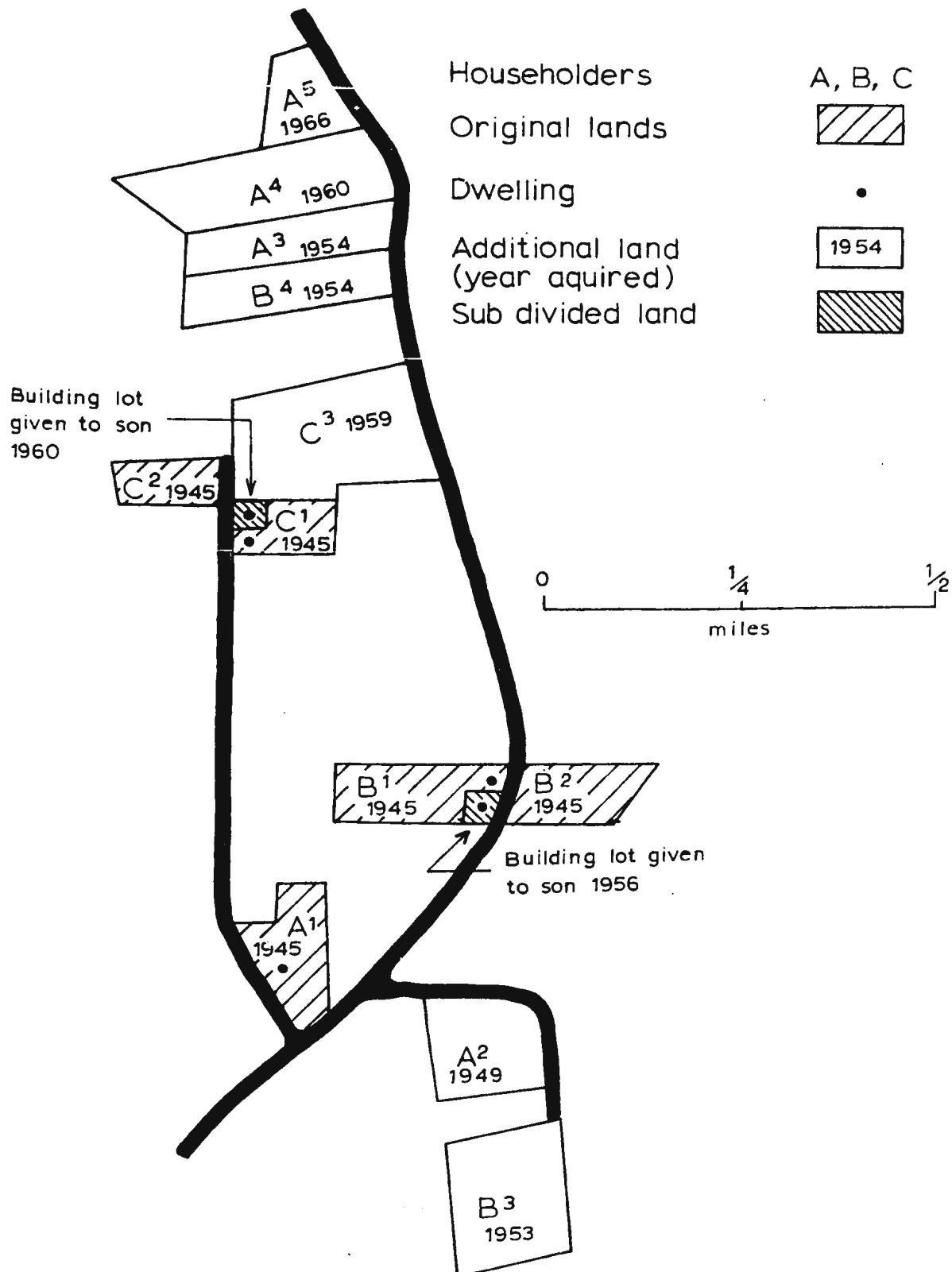
and the acreage size and number of separate land parcels in 1969 as compared with 1945. Recent householders resettling into Winterland, for example, have purchased road frontages each of less than one acre in size, usually about one-fifth to one-quarter of an acre, and these have increased the numbers of the very small land owners. On the other hand some Winterland farmers have increased both the number of separate land parcels and their total owned acreage. Similar trends in land tenure change are evident for Sandringham. In 1945, 11 householders held one land parcel and 14 householders held two parcels. In 1969 26 householders held one parcel and 8 held two. On the other hand whereas there were no householders with more than two land parcels in 1945, in 1969 six householders held three separate parcels or more, and two held tenure rights over 50 acres or more (Table 6.12).

Figure 6.9 delineates both the process of land subdivision and the process of land expansion with respect to three householder residents of Sandringham. The following description of each householder typifies changing land tenure patterns in both Winterland and Sandringham.

Householder A is an original land settler who was given a single land holding of 10 acres. In 1949 he acquired an agricultural lease to another lot (A2) of 10 acres a short distance from the farmstead. In 1954 he purchased another

Figure 6.9

SCHEMATIC SKETCH OF LAND EXPANSION AND LAND SUBDIVISION BY THREE SANDRINGHAM HOUSEHOLDERS



10 acres (A3) on the road west of the main settlement about one mile from the farmstead and added to this lot by acquiring through leases in 1960 and 1966 adjoining acreages totalling about 30 acres. Altogether he presently owns about 60 acres of land in three separate parcels, and together with his only son who has married and joined him in farming, cultivates slightly more than half the total acreage - that is, practically all of the suitable arable under tenure. His most recent acquisition is a green-house built on the farmstead (A1).

Householder B is an original land settler who acquired under the LDA (1944) two land lots totalling about 15 acres. The second lot (B2) was found to contain useless farmland and was not improved. In 1953 he leased (in son's name) 15 acres near A2 about one-half mile from home but found that this land was difficult to clear and cultivate. In 1964 he purchased 10 acres adjacent to A3 and found this land more suitable for planting. A second son who married but did not engage in farming was given about an acre of land on which to build near the paternal home (B1). Settler B is now over 65 years but continues to farm with his unmarried son. In 1969 the son built and operated a greenhouse on the farmstead.

Settler C is an original settler with two sons. One son engages in a farming partnership with his father. The other son is a truck-driver for the Department of Highways. In 1945 Settler C was granted two land lots (9 acres). Until 1959 his main income was derived from the produce of these two lots, then his son purchased a vacant lot of 20 acres adjoining the farmstead and expanded farming operations. In 1960 the other son was accorded the privilege of a building lot on the farmstead. Settler C, now in retirement, engages in assisting his farming son. Like his counterpart, Settler B, Settler C is especially interested and helpful in attending the new green house operation.

The changing pattern of land tenure in Winterland appears to have followed out of similar individual circumstances. Practically all householders who have expanded have had one son who took an active interest in farming and thus it would seem that the son has either urged expansion or provided the necessary motivation for the father to expand. Similarly non-farming sons and sons-in-law have often been accorded the right to construct dwelling units on road frontage properties and these differ only from the unrelated householders who have moved into the settlements in that they usually acquire land by gift whereas the latter have acquired by purchase.

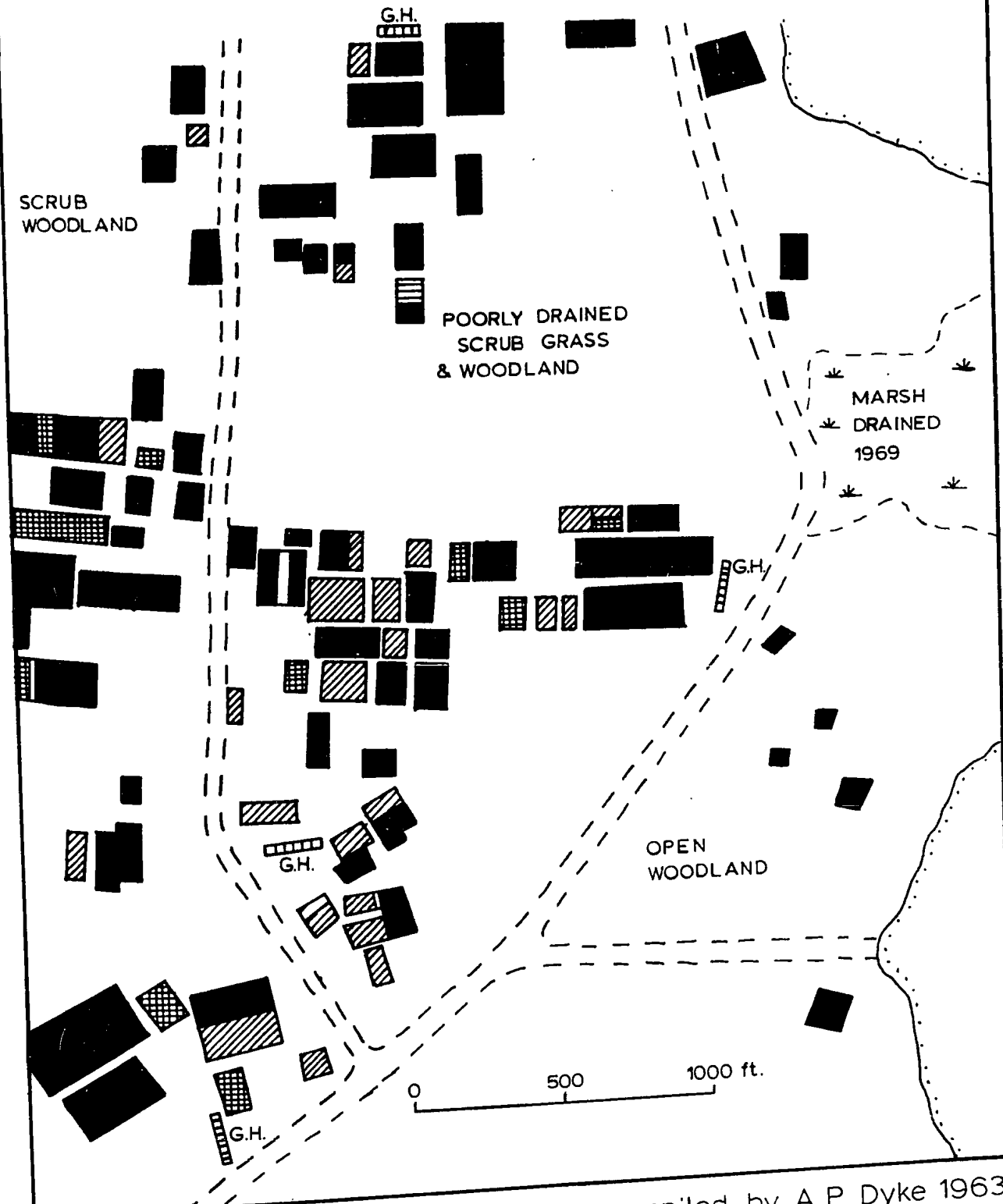
Land Use and Agricultural Economy 1969

The main objective behind expanding land clearances where they have been initiated on an individual basis in both Sandringham and Winterland has been to increase the acreage for root crop rotation. More recent developments under Government incentives have been focussed upon developing larger areas of pasture and winter fodder on bog-land peat soils. A few Winterland farmers have had some success in root crops, especially turnips, produced on peat soils but have by no means accepted the idea that bogland reclamation is the single solution to the land shortages. Indeed farmers in both Sandringham and Winterland are extremely sensitive to the quality of vegetables which customers prefer and to whom they sell individually door-to-door, and in most cases, to whom they have provided vegetables for several decades. Gambling on the production of new soils may, to the farmer, mean gambling with the quality of the produce and consequently his main market.

The single example of an intensive land use map made for any Commission of Government land settlement was that prepared by A.P. Dyke during the late summer of 1963 and contained in A.F. Williams, Land Use Surveys. North East Coast (Williams, 1963; 94). Dyke's map, a modified version of which is given in Figure 6.10, covers more than three-quarters of the improved land and almost all of the

ARABLE LAND USE IN SANDRINGHAM 1963

- Potatoes ▨ Cabbages G.H. Green house (tomatoes)
 ▩ Turnips □ Other root crops constructed 1968-69



Source: Modified from a field map compiled by A.P. Dyke 1963

cultivated area. The orderly layout of cultivation patches conforms very largely with the field boundaries established in the initial cadastral survey and fenced by the first settlers. Variations in the size of cultivations take their pattern after the variable physical properties of individual holdings, and the rotation pattern for the year 1963. Generally most Sandringham farmers follow a 4-5 year rotation as follows:

	Sandringham	Winterland	
	A	A	B
1st year	turnip	potatoes	turnip
2nd year	turnip	turnip	potatoes
3rd (& 4th) year	potatoes	potatoes	cabbage
4th or 5th year	cabbage	cabbage	hay or oats
5th or 6th year	potatoes	fallow	hay or oats

A - new land, B - fallow

Sandy soils in Sandringham make it difficult to produce hay, consequently it is seldom included in the rotation pattern. In Winterland the farmers follow a 5-year rotation pattern that includes one or two years in fallow. Potatoes are planted in years between turnip and cabbage to prevent the establishment of club-root, a disease which attacks both cabbage and turnip. Land shortages in both settlements, however, often prevent farmers from following the rotation through in each 5-6 year sequence, indeed as some cultivations in Figure 6.9 show, crop rotation often has to be practised within a single cultivation patch.

The production of vegetables in 1968 and the numbers of livestock kept in 1969 indicate that the major land use emphasis in both Sandringham and Winterland is presently very heavily on root crop production (Table 6, Appendix C). Farm cash income is derived from sales of potatoes, turnips and cabbages. The raising of beef cattle assumes some importance in adding income to about five farmers in Winterland who regularly keep 5-6 head or more, and the greenhouse production of tomatoes has added a new cash income to four Sandringham farmers. In Point au Mal the land assumes only a very modest importance for a few families at a purely subsistence level.

Though land use patterns and the major products of the land remain basically unchanged, the social organization and technology of farming, especially in Winterland and Sandringham, have undergone much more rapid changes. Farming is no longer an activity shared by all family members, male and female, adult and child, but has become primarily the work of male adults operating independently, or commonly in father-son partnerships. During the 1950s most of the commercial farmers converted from horses to tractors, from wheeled horse-drawn carts to pick-up trucks, and from heavy dependence upon subsistence-produced fertilizers such as barn manure, kelp and caplin, to almost complete reliance on commercial fertilizers. These technical innovations do not appear to be completely unrelated to social

change. For example, Sandringham farmers formerly used vast quantities of caplin as fertilizer. However, this entailed the men travelling some 4-5 miles to the nearest landing area and engaging full-time in catching. At the same time women and children took to the fields and spread the caplin which were transported by independent truckmen. Today this activity is no longer a feature of Sandringham farming, largely as a result of the fact that all family members apart from the men have abandoned the fields.

The marketing of vegetables has remained basically unchanged in Winterland and Sandringham in that marketing, like almost all other phases of farming, remains essentially individualistic. Changes in the markets themselves, improved road transportation and the possession of a farm pick-up have evoked some new adaptations. Winterland farmers, for example, still prosper in the luxury of the Burin Peninsula market area in which they have little competition except among themselves. Their regular door-to-door customers formerly purchased sufficient vegetables at harvest to last the household throughout the winter and spring season. Most customers now prefer to purchase smaller quantities at more regular intervals, and this has required farmers to sell more of their produce to food retailers or to provide storage and deliver door-to-door more regularly themselves.

PRIMARY MARKETS FOR SANDRINGHAM FARM PRODUCE

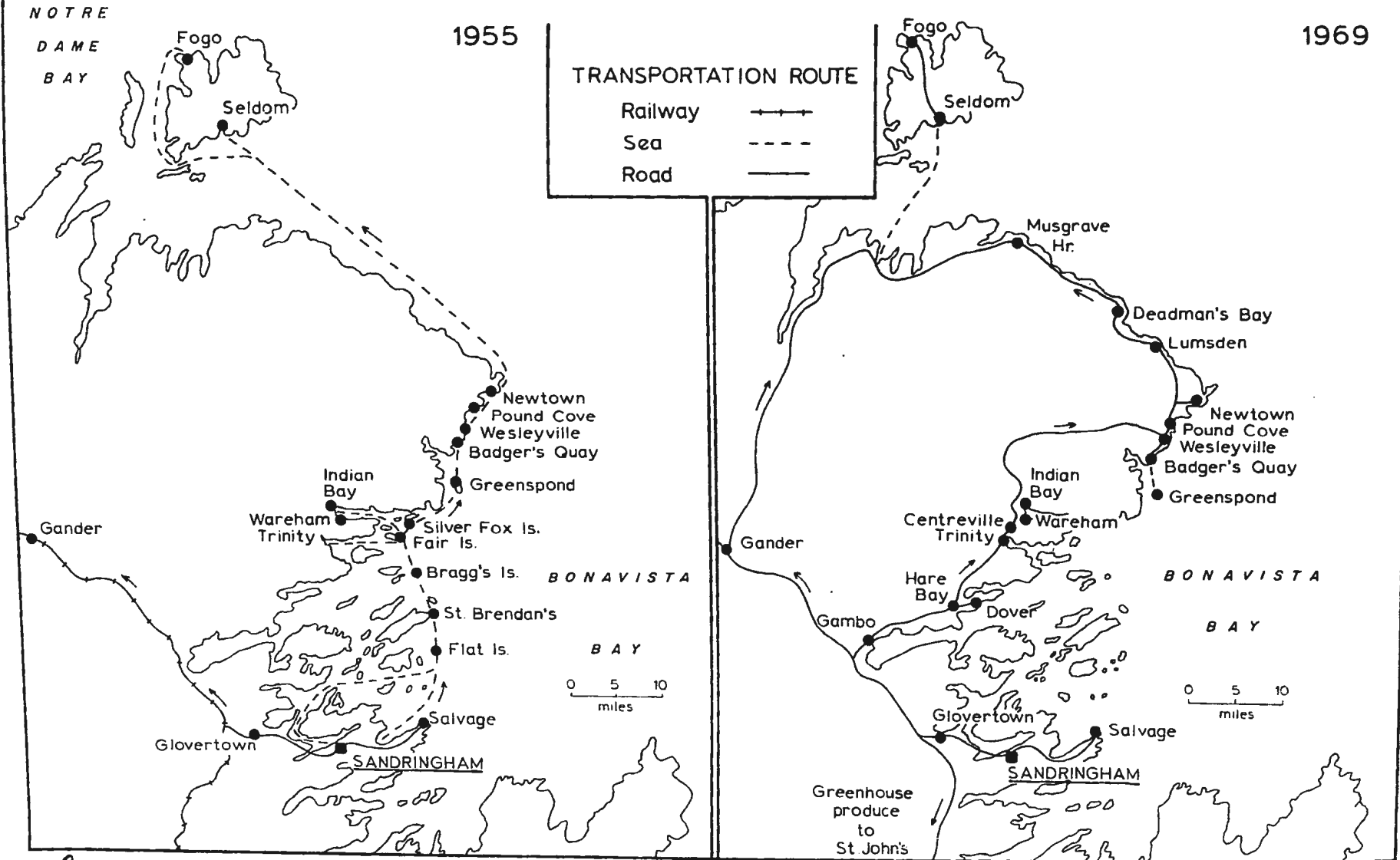


Figure 6.11

Sandringham farmers have adapted marketing procedures in response to the additional factor of shifting population and settlement patterns. Figure 6.11 shows that in 1955 some of the main market areas for Sandringham farm produce were located in island settlements in Central Bonavista Bay and that deliveries of vegetables were made by sea. About this time, however, a government-sponsored resettlement program began, and most of the island settlements were soon completely depopulated.⁶ Many of the migrating families relocated at centres such as Glovertown, Gambo, Hare Bay, and Trinity. Movers from Fair Island created a new settlement at Centreville. In 1956 Sandringham was linked to the Trans-Canada Highway and by a road via Gambo in 1959 to the north shore of Bonavista Bay. In 1969 one could find the Sandringham farmers still selling to their former island customers in their new locations and transporting almost all their market produce by road (Figure 6.10). Greenhouse produce has thus far been marketed co-operatively. Most of the 16,000 pounds of tomatoes produced in 1969 was sold to St. John's supermarkets, and shipped weekly as long as the supply lasted through a trans-island trucking service.

External Contacts and Services

It has been shown that interlinkage patterns between both Sandringham and Winterland and other settlements have

become much more frequent and regular in recent years than formerly in response to improved road transportation. Working commuters travel to and from work more regularly in their respective districts, the settlements share with neighbouring settlements economic resources formerly undeveloped, and farmers make more frequent trips into the market areas.

Within their respective groups of settlements each of the small-holding settlements are among the smallest by population size. Sandringham is one of a group of seven settlements for which elementary and high school services, and medical services, have been centralized in Eastport four miles away. Weekly shopping is conducted by most Sandringham householders either at Eastport or Glovertown. Similarly Winterland children now attend school in an inter-community centralized system seven miles away in Salt Pond, and householders do most shopping for clothing and food in Marystown and Burin. The schools in the settlements and the settlements themselves no longer provide the central focus for social activities.

CHAPTER VII

CONCLUSION

The establishment of state-sponsored settlement schemes has formed a basic approach to rural development in many parts of the world at many different periods and for different reasons. Land settlement has been a traditional approach of government for repatriating war veterans. Other reasons prompting land colonisation include efforts to absorb the urban unemployed, to arrive at self-sufficiency in agriculture, to find an outlet for expanding rural population, to create peasant ownership of lands or to reform a complete society. During the years following the first world war and throughout the Depression of the 1930s, land settlement schemes were undertaken in many parts of the world including Germany, Italy, Australia, Canada, and the United States. Currently state-sponsored settlement projects are very marked features of rural development schemes throughout the tropics, including parts of Africa, Southeast Asia, South America and islands of the Indian and Pacific Oceans.

Many of these state-sponsored settlement schemes have attracted the critical curiosity of scholars, including geographers. Though the methodologies of geographers tend

to vary and some schemes are investigated in the process of development and others after they are completed, most geographers approach the study of land settlement schemes by examining variables that can be broadly grouped under four headings (1) the political factors (2) the natural environmental conditions (3) the settlers and (4) the regional context. The interrelationships among these four basic factors have an important bearing upon the phenomenal content of the areas involved in such programs, and contribute to their success or failure in either the short or long term.

The Commission of Government adopted a policy of land settlement during the 1930s in Newfoundland - the main objective being to relieve the problem of unemployment. In its initial stages the scheme lacked any specific objectives and proceeded purely as an experimental scheme without the guidance of anyone experienced either in land settlement planning or agriculture. Many costly mistakes resulted. Poverty stricken families were selected without regard to their physical, mental, social or cultural characteristics and placed indiscriminately in the midst of woodland areas which were hastily selected without adequate surveys. These families were expected to make within two years at very modest expense a viable economic community and even more idealistically, to produce social models that would effect

the social reorganization of the whole of the island. The adverse reaction of settlers to operations imposed by the promoters, such as land clearing for community farming, resulted in a change of policy which emphasized individual efforts.

When initial efforts failed to produce the expected results in relieving unemployment and certain of the settlements (Markland and Haricot) became as problematic as the depressed areas from which the settlers were drawn, expert advice was sought abroad to reorganize the entire policy on land settlement. In 1939 a three-year plan was implemented to revise the existing settlements: Markland, Haricot, Lourdes, Midland and Brown's Arm and a new programme was started to develop other land settlements. Out of the latter Sandringham, Winterland and Point au Mal emerged. The three-year plan proceeded much more smoothly than the initial effort, and was completed within the time limit, and at only slightly more than the anticipated cost. While the land settlement scheme under the three-year plan was in its first year, World War II began. Events associated with the war effort - enlistment, base construction, and the demand for Newfoundland fish, wood and mineral products - lifted the Newfoundland economy out of the depression. Unemployment and relief problems were dispelled. The land settlement scheme was ended until after the war when Cormack was established to repatriate veterans who wished to become farmers.

The ease with which wage employment could be had in the construction of two American military bases greatly affected the economics of four land settlements. Around 1941 land settlers in Haricot and Markland found employment in Argentia whilst many of their counterparts in Lourdes and Point au Mal were engaged on the Harmon Air Force Base in Stephenville. In the long-term base employment undermined the local economy of each of these settlements and stifled the improvement of technology in farming. When the Harmon Base closed in 1966, Lourdes and Point au Mal were left depressed along with the greater part of the Port au Port region. Similarly most of the Markland and Haricot settlers found themselves engaged in activities which were basically unrelated to the goals established in the land settlement scheme - working first in Argentia and later at construction jobs away from their respective settlements. Agriculture in Markland, Haricot, Lourdes and Point au Mal was never raised above the level of a supplementary activity to other forms of employment, and has tended to decline from the 1940s to the present day.

While it could be argued that certain of the land settlements did not prosper as farming settlements because of the poor natural environmental conditions for farming, there are examples at Brown's Arm and Sandringham where soils, and climatic conditions were even less favorable than at Lourdes and Markland, and yet where fairly successful

small-scale economies developed. Though the returns from farming were generally meagre and the inputs of labour very great many of the Sandringham and Brown's Arm settlers managed to eke a livelihood from their land holdings. The Winterland experiment in land settlement, however, was probably the most successful of the eight projects undertaken. Here a relatively favorable environment for farming (soils, climatic conditions and markets) met with a relatively favorable human response (family labour inputs and persistence). The main limitation toward a larger agriculture development in Winterland appears to have been the shortage of good land that could be reclaimed with the available technology. The Midland settlement, at least for the first generation, developed along much the same pattern as Brown's Arm. Small-scale root crop farming combined with winter logging established most families in a self-supporting role.

One of the most important factors that bears upon the success or failure of any state-sponsored resettlement program is the response of the settlers to new patterns of living in a new environment. In the case of the Newfoundland land settlements the retention rate of original settlers was higher in those settlements where selected families shared common social or cultural characteristics with other families such as through kinship or religion (Lourdes, Winterland, Sandringham) than in settlements composed of elements drawn from varying backgrounds (Markland, Haricot,

Brown's Arm). Similarly the regions from which settlers were drawn and resettled appear to have had an important bearing upon early population retention and replacement processes. Haricot was not favored by Protestants from Trinity and Conception Bay who were resettled into a Roman Catholic district and these drifted away, whereas the few Catholic families who had belonged to the district previously remained. By contrast, Roman Catholic families resettled in Brown's Arm, located in a Protestant district, all departed before 1945, yet Brown's Arm proved favorable enough to attract replacement families within the general area. The Protestant replacement families in Brown's Arm, like the families chosen for Sandringham and Winterland, represented relatively localized migrations in terms of distance and these possessed some environmental foreknowledge of the settlement sites to which they migrated.

Demographic changes in the Newfoundland Land Settlements since land-owning families were established in 1945 have resulted in both long-term population growth (Lourdes, Sandringham, Winterland, Brown's Arm and Midland) and decline (Markland, Point au Mal and Haricot). The growth of population in five of the land settlements has resulted from a high retention of original land-owning families along with a second generation establishment, mainly sons, who have married, constructed homes and are now raising their families. The household occupants and

total population of Winterland has recently been increased by families moving in under a current government resettlement program and Midland is currently increasing in population due to an influx of families from the Corner Brook area. Since 1945, Markland, Point au Mal and Haricot have experienced a net decline in household units occupied and in total population. Many of the families who received land grants under the Land Development Act (1944) have moved away, and most of the young people who have grown up in these settlements have drifted to jobs and residence elsewhere. Common to all land settlements since 1945 is the fact that the sons and daughters who have settled permanently tend to have received fewer years of schooling or to lack trade training.

The changing population, particularly the changing number of household units within the designated land settlement areas which were legally fixed to the number of land grants issued, has produced a changed pattern of land tenure. On the one hand where the number of household units have increased (Lourdes, Midland, Sandringham), married relatives of land owners have been permitted to possess building lots along road frontages - that is, subdivision of original holdings has become characteristic. In these settlements some families occupy only a building lot and in that respect are practically landless. On the other hand the decline of household units in Markland, Haricot and Point

au Mal has resulted in a large proportion of the land lots granted under the Land Development Act presently been held by absentee owners, or, as in the case of families receiving resettlement grants in Point au Mal, being returned to the Crown. The only significant land extensions and expansions to those issued under the L.D.A. (1944) have occurred in Sandringham and Winterland and only in these two settlements has there been any significant increase in the amount of land cleared and placed under cultivation in addition to that provided by the three-year plan ending in 1942.

The functions of the various land settlements have continued to undergo rapid change from the 1940s to the present, in response to both internal and external stimuli. The small settlements, that is all settlements besides Lourdes, have been gradually losing the few social and economic functions which they had to larger central places nearby. Lourdes, by contrast, fulfills the role of the educational, commercial and medical centre for a number of smaller-sized settlements on the outer Port au Port Peninsula. Road improvements and access to other parts of the province through the acquisition of personal mobility have greatly altered the spatial/temporal patterns of movement from the former land settlement, and these innovations have vastly altered both the role of the settlements and the overall adaptations of the people living in them.

CHAPTER I FOOTNOTES

1. Detailed descriptions of the political, economic and social conditions of Newfoundland during the 1930s are contained in a number of reference sources. The primary sources are the Newfoundland Royal Commission (1933) Report, commonly known as the "Amulree Report", and the Files of the Commissioners 1934-1948, contained in the Newfoundland Archives. Published references include Mackay, R.A. (ed.), "Newfoundland, Economic, Diplomatic and Strategic Studies", 1946; Gurney, H.F., "Economic Conditions in Newfoundland", 1933; Smallwood, J.R. "The Book of Newfoundland" Vols I and II, 1937; Lodge, T. "Dictatorship in Newfoundland", 1939; and Perlin, A.B., "The Story of Newfoundland", 1959.
2. Calculated from the total population of the island in the Newfoundland Census 1935.
3. "Their survey of other industries bring the Commission to the conclusion that land is the only alternative for the absorption of the country's surplus population". (Observer's Weekly, St. John's, January 31, 1935.)
4. The initial group of land settlement sponsors called the "Board of Trustees", included a lawyer, a doctor, a landscape architect, and two prominent St. John's merchants. The idea of land settlement came originally from the first ten families themselves, who having made proposals to government for a grant of land and financial assistance, were directed to find a group to act as trustees. The trustees would hold responsibility for expenditures of money and implement the principles of development. The group of ten acquiesced, and presented their proposals to the above who agreed to act as Trustees. (FOC/NA/129/1934a).
5. Cf. "The basis of the initial enterprise was that the Government would place at the disposal of the Trustees a capital sum equivalent to the cost of two years' dole, and that the Trustees should make themselves responsible for the settlement of ten families on the land, supervising in detail their activities until such time as they should become self-supporting" (FOC/NA/129/1934).

6. Cf. "Because it might become an historic first it was called "Markland", the name that the Viking explorers gave to this Island nearly 1000 years ago." (Observer's Weekly, St. John's, September 1, 1934). Scholars now generally agree that the "Markland of the Vikings" was in Labrador.
7. Cf. "Newfoundland Government propose immediate steps to settle 60 families on "Markland" on Agricultural Settlement near Whitbourne begun under the control of group of public spirited citizens of St. John's as Trustees..." (quote from a Telegram to Secretary of State for Dominion Affairs sent 28th June, 1934 (FOC/NA/129/1934c).
8. The value of the loan requested amounted to £100,000. This was sanctioned by Colonial Office on February 14, 1935. Terms of the loan allowed first three years free of interest and thereafter to be repaid within 20 years by equated annual instalments bearing interest at 3½ per cent (FOC/NA/129/1934b).
9. When Sir John Hope Simpson, Commissioner of Natural Resources, departed, Thomas Lodge, Commissioner of Public Utilities assumed the role of government agent on the Land Settlement Board. When he later became Commissioner of Natural Resources land settlement reverted to that department.
10. See "A Report on The Development of Agriculture in Newfoundland" By Professor J.A. Hanley, dated 29 December, 1938, contained in "Papers Relating to a Long Range Reconstruction Policy in Newfoundland". Vol. II, printed 1938 by Robinson and Co., Ltd., St. John's, Nfld.
11. See "Report on Land Settlements in Newfoundland", Department of Agriculture and Rural Reconstruction Economic Series No 1, June 1938, and "Interim Report of Mr J H Gowin" in "Papers Relating to a Long Range Reconstruction Policy in Newfoundland" Vol 1, printed by Robinson & Co., Ltd., St. John's, Nfld, 1938.
12. The only land settlement scheme started by Commission of Government after 1940 was a War veterans' farming settlement at Cormack in 1946. (See Wonders, 1951, pp. 148-150.)

CHAPTER II FOOTNOTES

1. See for example T.P. Field, Postwar Land Settlement in Western Australia, (University of Kentucky Press, 1963) pp. 1-2; R. Wikkramatileke, "State Aided Rural Land Colonization in Malaya", Annals, Association of American Geographers, Vol. 55 (1965), pp. 377-403, and also E.A. Ackerman, Geography as a Fundamental Research Discipline, (University of Chicago, 1958) pp. 19-20.
2. Cf. "At the end of 1934 and the beginning of 1935, the transfer of some people from the South West Coast was commenced on the initiative of the Department of Natural Resources and the local Parish Priest." (FOC/NA/130/1937b).
3. I am indebted for much of the detailed information on Lourdes to Mr. F.J. Warren of the Department of Mines, Agriculture and Resources, St. John's. Mr. Warren was the land settlement manager at Lourdes 1935-1938.
4. There are three variations commonly used in the spelling of this place name - Haricot, Harricott, and Harricot.
5. Dr. Hanley regarded Haricot settlement as a poorly selected site but was more optimistic about its chances to succeed than Governor Walwyn, Cf. "Haricot is less suitably located. It is the settlement I like least of all, but the position there is by no means hopeless." (Hanley 1937; 51).
6. I am indebted to Mr. George Chafe, Director of Provincial Parks, St. John's, and former land manager at Brown's Arm, for detailed information on his work and experience in the Land Settlement scheme.
7. A similar logic motivated land settlements in many parts of the world during the depression of the 1930s. See for example, Tomorrow a New World: The New Deal Community Program by Paul K. Conkin, published by American Historical Association, Cornell University Press, Ithaca, New York, 1959.
 Here are idle men; there are vacant lots;
 get them together and Mother Earth and
 Mother Nature will wipe all tears from their
 eyes and they shall be happy and satisfied
 in a primitive acadian simplicity (quoted in
 Conkin 1959; 27)

Cf. ante

Every land settlement scheme is based on the fundamental assumption that, given suitable land, the average human being can extract a living out of the soil....

(Lodge, 1937: 66)

8. Mr. R.H.K. Cochiu was a landscape architect of Dutch extraction born in Java. He was brought to Newfoundland by a St. John's merchant family to develop a park and later became superintendent of roads for the Newfoundland Government. In 1934 he became a member of the Markland Board of Trustees and the first settlement manager. He left Newfoundland in 1937.
9. The suggestion made in the Interim Report on Markland by the Trustees, December, 1934 (FOC/NA/129/1934a) that "The money expended on behalf of each man is ultimately to be repaid to the Government", apparently refers to the cost of the dwelling, household furnishings, and initial clothing allowances, in that regular food maintenance and clothing were provided for work done on behalf of the Government in creating a settlement.
10. Compare the following reference to Markland
The manager of the settlement considers that a reduction on 1st November, 1938, of the present rate for an average family of \$365 per year to \$190 per year might result in 20 to 30 of the smaller families leaving the settlement. The manager would welcome the evacuation of these people as it would leave more land, cleared and uncleared, available for the fifty or so settlers who remain."
(Gorvin 1938a: 21)
11. The original arrangement of the Government and the Land Settlement Board provided for the transfer of crown land to the Board who were then to enter into an agreement with settlers on conditions of transferring ownership. In his report to the United Kingdom Government 1937, Newfoundland Governor Humphrey Walwyn writes
Neither the Board of Trustees ... nor the Land Settlement Board ... ever had any official or legal standing or definite constitution.... For some reason which does not now appear clear, no conveyance was ever made and no Trust Deed entered into, and the site of the Markland settlement continues to be ordinary Crown Land.
(FOC/NA/131/1937a).

CHAPTER III FOOTNOTES

1. For a detailed account of recent bogland developments in Newfoundland see A.F. Rayment and H.W.R. Chancey "Peat Soils in Newfoundland", Agricultural Institute Review, January-February, 1966; Report on Bogland Reclamation 1956-1958, Agricultural Division, Dept. of Mines and Resources.
2. See also W.M. Drummond and W. Mackenzie, Progress and Prospects of Canadian Agriculture. Report to the Royal Commission on Canada's Economic Prospects. Ottawa.
3. This road was built between Whitbourne and St. Mary's Bay prior to land settlement. Whitbourne was also linked to Holyrood and thence via the Conception Bay Highway to St. John's.
4. Contained in the descriptive notes accompanying a surficial geology map of the central and northern portion of the Avalon Peninsula, published by Geological Survey of Canada, 1960. See Map 35 - 1959 Surficial Geology St. John's Newfoundland printed by Surveys and Mapping Branch, Geological Survey of Canada.
5. P.K. Heringa postulates a different origin for the fine till deposits to be found on the end moraines in the Central Avalon area. He has suggested that the ridges are covered with wind blown (aeolian) deposits (1969, pers. comm.). Mr. Heringa is a soil scientist working at the Federal Department of Agriculture Experimental Station, St. John's.
6. Mr. J. Wade was one of the settlers originally destined for residence at Vinland and one of the first settlers to move into Haricot.
7. Until the late 1920s the settlement of French and Scots-Irish ethnic inhabitants near the coast was called Clam Bank Cove. This settlement was apparently renamed by a Roman Catholic Priest, the Rev. Fr. Pinneault, after the famous Lady of Lourdes shrine in France. Father Pinneault was himself a native of France and had begun to construct a church at Lourdes when he was recalled and replaced by the Rev. Fr. O'Reilly (See p. 15).

8. G. Greenlee of the Agricultural Experimental Farm conducted a soil survey of the Port au Port Peninsula during the summer of 1969 and provided most of the detailed information on the soils of Lourdes.
9. See W.C. Wonders, Settlement in Western Newfoundland (1951), pp. 170-73.
10. The Reid Newfoundland Company was granted 3,910 square miles of land lots in 1901 for constructing and operating a railway. These lots ranged in number from 3 to 247. The railway company did not develop these holdings, and cutting rights were later leased by the two Newfoundland paper companies. For a fuller account of the tenure arrangements see Report of the Newfoundland Royal Commission on Forestry (1955), pp. 190-1.
11. Named after one of the Royal Estates in England.
12. See Report of Marketing of Agricultural Products in Newfoundland ARDA Project No. 1044 Ch III for a full account of yields of vegetables in seven different parts of Newfoundland including the Eastport-Sandringham, and Winterland areas.
13. The northeast boundary of Terra Nova National Park was drawn across the isthmus of the Eastport Peninsula between Alexander Bay Arm in the north and Newman Sound in the south and lies about one mile from Sandringham.
14. Named after Sir Marmaduke Winter, a member of the original Markland Board of Trustees.
15. See footnote 8 above.
16. The writer is indebted for much of the detailed information on Point au Mal to Mr. K. Gillingham, Department of Mines, Agriculture and Resources, St. John's. Mr. Gillingham was at various periods land settlement manager in Lourdes, Point au Mal and Cormack.

CHAPTER IV FOOTNOTES

1. The first amalgamated schools in Newfoundland were organized at Grand Falls and Deer Lake. In both these places, however, amalgamation included only Protestants.
2. There were very few tractors in Newfoundland in 1934. The Markland Board of Trustees apparently acquired one on loan from Sir William Coaker's Farm in Port Union. In 1935 the Commission of Government began to purchase tractors and bulldozers and had at its disposal by 1942 some 32 machines. I am indebted for much of the detailed information on heavy equipment and land clearing to Mr. John Griffin, Department of Mines, Agriculture and Resources, Markland.
3. An account of Dr. W.G. Ogg's visit to Markland is contained in a letter written by Dr. Ogg to Sir John Hope Simpson dated September 6, 1935 (FOC/NA/139/1935).
4. Similar discrepancies of actual values appear in the 1945 Census for other land settlements. In the cases of Sandringham, Brown's Arm and Point au Mal improved acreages are recorded as total occupied acreages and in amounts of 93 acres, 83 acres and 135 acres respectively. Government LDA (1944) records indicate 283 acres owned at Sandringham; 574 acres, at Brown's Arm and 422 acres, at Point au Mal, and the managers reported 1942 improved acreages of 170, 200, and 172 respectively. To consider the possible argument that the difference is caused by land abandonment between 1942 and 1945 - firstly the time is too short for land classed as improved in 1942 to be considered unimproved in 1945 even if farming was curtailed - secondly the case example of Sandringham tends to show that the Census is very inaccurate

Sandringham Improved Acres

1942 (FOC)	1945 (Census)	1949-52 (Williams 1963)
170	93	220

Dr. A.F. Williams in Land Use Surveys (1963) determined the improved acreage of Sandringham in 1949-52 to be 220 acres from air photographs taken in the period. This is very consistent with the acreage for which land clearing bonuses were paid in the period 1942-1952 when added to the 1942 total of 170 acres.

5. Cottage hospitals built at Markland and Old Perlican in 1935 were the first of a series of rural district health institutions built in Newfoundland by the Department of Public Health and Welfare as headquarters for doctors and district nurses (FOC/NA/1936). The Markland hospital still serves as a district institution for the central Avalon and southern Trinity Bay areas. In 1969 the government proposed to close this hospital but public reaction was so adverse that it was decided to defer the decision.
6. See Snowden, D. The Co-operative Movement in Newfoundland, 1965, p. 13, and Appendix D. 2.
7. The original curriculum used in Markland Schools was based upon the Norwegian subject "Hjematedslaere" (homestead learning) (FOC/NA/129/1934). The Registry of Public Examinations in the Department of Education shows that students in Markland were entering public academic examinations by 1938. By 1945, 29 students - 22 females and 7 males - had written at least one examination between Grades VIII and XI. Thirteen students had completed high school successfully. A brief follow-up on the place of residence and occupation of these 29 students showed that only one, a female, settled at Markland. Twelve girls married Americans and moved to the USA, and another four moved to the Canadian Mainland. The remaining girls married elsewhere in Newfoundland. Only one of the males left Newfoundland.
8. In 1944 equipment originally purchased to clear farms in land settlements was made available for land clearing in most parts of the island and used to implement a National Land Clearing Scheme. A bonus of \$25.00 per acre was paid for each acre of land cleared. Since 1945 the land clearing scheme has been modified. Bonuses have increased and the scheme extended to bogland reclamation. Records of the Department of Mines, Agriculture and Resources detail the names of persons for whom land has been cleared since 1944. See the Royal Commission on Agriculture (1955), pp. 311-321, for a more detailed explanation of Government land clearing programs.

CHAPTER 7 FOOTNOTES

1. There is one minor exception to this statement. At the time of the 1935 Census there were five settler families resident in Lourdes and five male settlers without their families. The remainder of the settlers arrived in September 1935, but the census enumerations were carried out about a month previously.
2. This settler later returned around 1940 and built a home outside the land settlement area.
3. Settlers were given the option to pay \$50 in five or ten equal annual instalments.
4. I am indebted for information on the Co-operative Society in Lourdes to Mr. G. Peters, Manager of the Society since 1951 (pers. comm. July, 1963).

CHAPTER VI FOOTNOTES

1. The settler population for Point au Mal was chosen from Roman Catholic families in Placentia Bay. The following words of a song composed about the time of the migration indicates that a government official (Currie) circulated among settlements in Placentia Bay selecting some and encouraging others to become land settlers in Port au Port.

Twas 1939 when Currie came around
to get a crew for Port au Port
their names he did pin down
there was Leo Jones all from the point
the first man on the list
and also Peter Hynes and Myles
They're going to make a shift.

He called down little further
went in to see Jim Flynn
he's going to take his family
all in the coming spring.
There's John Hynes and John Heffern
and William Barry too
and Peter Willie Wakeham making up the crew.

(I am indebted to Mr. Edward Heffern, Stephenville, formerly of Petite Forte and Point au Mal, for relating the words from the "Port au Port Song". The composer of the song is unknown.)

2. Cf. similar movement of a Red Island settler from Brown's Arm to Midland, Chapter V, p. 194.
3. This bogland area was originally leased to the Flying L Ranch whose owner proposed to develop a large beef herd on the Burin Peninsula. Having failed to make necessary improvements, the owner lost his rights of tenure and the Newfoundland Government through the Division of Agriculture assumed control, and developed part of the area in community pastures.
4. I am indebyed to Mr. Reuben Newport, Winterland, and Mr. G. Williams, Department of Mines, Agriculture and Resources, St. John's for detailed information on the reclamation and operation of bog-land schemes in the Winterland area.

5. I am indebted to Mr. Fred Evans, Department of Community and Social Development, St. John's for general information and empirical data on aspects of the ARDA Project green house operations and on bog land reclamation in Sandringham.
6. See C. Grant Head "Settlement Migration in Central Bonavista Bay, Newfoundland", pp. 92-110 in Gentilcore, R.L., (ed.), Canada's Changing Geography, 1967.

APPENDIX A

The following extracts are taken from a diary written by Baxter King, a land settlement accountant at Sandringham, during the period between March 19 and August 5, 1940. The main contents of the full text deal with the day-to-day problems of establishing this particular settlement as some of the settlers move in and others apply for entry. The portions of the diary which follow are reproduced with the kind permission of Mr. King's daughter, Mrs. K. Gogos of the Department of Community and Social Development, 4 H Division, St. John's. Editorial comments are enclosed thus [...]

March 19: Bit of job to keep some of them [the settlers] here now.... Tractor busy today hauling rails, stakes in from beyond the Devil's Turn.... Dr. McNamara claims that [settler] is not strong at any time and can never do any hard work. The nurse from Salvage also said the same.

20: Men busy today hauling logs, rails etc. Trees too wet for cutting.

22: Good Friday. Very quiet most men working while others doing odd jobs.

23: Very good morning in the woods but around 11 o'clock started snowing very hard with gale of N.E. wind. All men returned from woods and went to work in the workshop....

24: Easter Sunday. Frosty with a gale of west wind. Roast salt fish for supper.

25: Cold today with high wind S.W. Heard today that at long last the saw mandrel has arrived at Alexander Bay Station Railway 18 miles away ... Most men here now have enough rails to fence their land and some of them have cellar material as well.

26: Mr. Stentaforde [manager] arrived today from St. John's. Mailman here, but very little mail ...

27: Mr. Stentaforde resigned today.

29: [Settler] took some mail to Alexander Bay. Received saw-mill license.

April 1: All men working on house 30 getting it ready to haul to lot No. 25.

2: Snowing. All men working on inside of their houses.

3: Tractor hauled house 30 to lot 25.... Received two sets of cart wheels from Markland today.

4: The nurse here around 9 P.M. to inoculate all settlers against diphtheria. A few refused to have it done.

5: [Three settlers] very sick today from the effects of their inoculation. [Two settlers] fitted power take-off to tractor and will probably saw first logs this afternoon.

6: Most of the Salvage men gone home [for weekend]. Two or three more men sick in bunk-house.

8: Tractor in mill and first logs sawn. [Three settlers] went to Newman's Sound today by dog team to haul lumber from Lane's mill to edge of ice to be taken from there to Happy Adventure by boat.

10: Wrote letter to Secty Rural Reconstruction advising that [a settler] was unfit for manual labour... it was thought advisable that [settler] be asked to leave the settlement.

12: [settler] today left the settlement... House No. 17 formerly occupied by [settler] was today given to [another settler]. Some of settlers hauled two loads of lumber from Happy Adventure ...

15: Flat Island settlers who had been home since Thursday returned today....

16: ... letter from Secty. Rural Reconstruction advising that [settler, 12 above] leave the settlement and that we have all settlers and their families examined by Dr. McNamara. ... must soon start land clearing....

17: ... wrote letter to Secty. that [settler's wife] will have to be sent to hospital soon and asked if he could make arrangements.

20: Tractor already for land clearing ... will probably start on Monday

22: Tractor clearing in front of shop [supply store] but owing to rocks is making rather a mess of it.

24: All settlers on community work after dinner ... put culverts across the road near the shop ... Tractor broke trunnion bolt ... wired Secty Rural Reconstruction to send another at once. Had to disconnect angledozzer.

25: Everyone on community work today....

26: Cecil Turner from Happy Adventure made first trip over road in his truck. Got her ditched on way in and our tractor hauled her out.... Received letter from St. John's advising that Mr. Clarence Badcock will succeed Mr. Stentafor as Manager. Mr. Badcock was manager at Markland for two or three years. Mr. Stentafor will be leaving here Thursday, May 2.

27: Most of Salvage settlers gone home and will try bring their families here next week.

29: Tractor went to Happy Adventure for load of lumber and arrived just in time to take some of settler's household equipment. [Settler] was the first to arrive with his family and

furniture etc. ... By six o'clock we had four families here with their belongings....

30: Tractor clearing on Lot 2 ...

May 1: [Settler] arrived today with his family and luggage. Cecil Turner hauled two loads here in his truck.

2: Mr. & Mrs. Stentaforde left here this afternoon for Pasadena [near Midland] to start farming for themselves.

3: Tractor working on land. Sagona [Railway coastal boat] arrived Eastport, first trip for this season.

6: Tractor on Lot 34, belonging to [settler] finding land there very hard to clear. Soil very good, but extremely rocky. Will not be able to clear any of this land for spring planting.

7: decided today to give [settler 6 above] lot 5 where some land already cleared. This was done to give [settler] some land this spring as well as the other settlers ...

8: raining hard all day. Tractor spent short while on lot 5 but had to retreat ...

9: all settlers busy on their land. Tractor on lot 12 today and finding it very rocky ...

10: Work commenced on road between here and Eastport ... Tractor had accident, tank assembly broken. This breakdown will retard our work somewhat and perhaps we shall not get as much land under cultivation as we anticipated.

12: Lumber arrived from A. Turner & Bros [Happy Adventure]. This will finish the inside of all settler houses.

14: Mr. Badcock arrived today ... not much doing with tractor idle.

16: Mr. Badcock's furniture and car arrived today.

17: [Settler's wife, see April 17] sent to St. John's for hospital treatment.... Had message from Secty advising hospital arrangements made ... Rev. Fowlow [Anglican Priest, Salvage] here today.

18: had message from Bonavista inquiring how many families we can handle now and what conditions were ... Mr. Badcock decided to go to Bonavista

20: Tank assembly not yet arrived, consequently not much doing.

27: Tractor assembly attached and will be ready for work tomorrow.... Some freight arrived today by rail.

28: Decided today to close the bunk house.

30: [Settler] today given lot 7 in place of lot 31 which is very rocky.

June 1: Tractor ploughing lot 7 for [settler]. His house located on lot 31.... Mr. James and Mr. Badcock looked over lots 34, 35, 36, 37 and decided that there is a possibility to locate two settlers on the four blocks although clearing conditions there will be more difficult and the outline not quite so good as the blocks in section ... the land in the immediate vicinity was also gone over but no possibility to settle there.

3: Mr. Badcock made trip to Glovertown to see nurse Daphne Arnold re professional services for this settlement.

6: Tractor on lot 25. This the last block to be ploughed so next week we shall probably get some seed in the ground.

7: Maintenance for settlers arrived. [Settler] received \$2.00 only. He has father, mother and brother depending on him. There will probably be some trouble over this matter.

10: First potatoes sown today by [Settler]....

11: Seven holdings ready for planting.
The holdings will average 1¼ acres cleared.
Three or four settlers today planting potatoes.

12: received two more young pigs today...
Schooner J.C. Squire arrived yesterday bringing
three tons of hay.

13: Men busy today sowing potatoes. Most of
them will set 7 barrels as well as turnips and
cabbage. War situation desperate for the
Allies. Mr. King adds events reported by radio
on progress of World War II

14: Germans last night entered Paris ...

15: Things here normal

16: Boat named Kingdom No. 1 at Eastport
today. Rather suspicious looking craft
[suggestion of German Spies].

21: Most settlers sowing turnip seed ...

22: ... received message from St. John's
asking how much lumber required to bring the
settlement up to 50 houses.

25: Settlers now have all planting finished.
There remains now only cabbage plants to set.

26: Mr. Badcock received wire from secty
today. Quote "proceed selecting settlers as
per list received" ...

27: List of settlers mentioned in Secty's
wire arrived today.... They are men from
Bonavista, 11 in all. They are of all
denominations, three only are Church of England.
Mr. Badcock wired secty today on this matter.

28: [Two settlers] went to Salvage and bought
3150 cabbage plants for the settlement ...

29: ... settlers planting cabbage plants.

July 1: Taking stock today in shop ... Mr.
Trucksis of the Co-operative Division arrived
to organize a co-operative society.

2: Mr. Trucksis held a meeting of all the settlers and talked to them on co-operation.

3: All settlers at Eastport hauling caplin for the ground.

4: Tractor land clearing as usual. Some settlers now have 5 acres cleared.

5: Bought 2900 cabbage plants at Eastport ... We have a fairly large amount of cabbage planted here.

6: Men hauled some caplin today at Salvage.

8: Men still hauling caplin.... All potatoes are doing very well, but turnips, carrots etc are not showing good signs. Cabbage plants on certain blocks are doing very well.

9: Men hauled about 40 barrels of caplin ... Cultivation bonus cheques arrived by Sagona ...

11: Wire from R.S. James as follows "Have you room and arrangements for one settler from Harbour Grace. Seems good material. Three sons." We have room here for ten or a dozen settlers but could not possibly take one only. If a number were available, the bunkhouse could be opened until they got a home built.

13: Mr. Badcock had meeting of settlers to further discuss co-operation.

15: Few settlers have been hauling kelp from the arm for their land. Others have started to dig out for cellars ... Land clearing is proceeding rapidly: all that's needed here now is more men to carry on. Weather very hot and dry. Unless rain soon comes all the crops will be burnt up, that is, all but potatoes.

16: Hotter than ever ... received from Markland today 12 sacks nitrate of soda.

17: Settlers today on community work. Tarring roofs of all buildings. Hot as usual.

18: ... message advising Mr. Badcock to select more settlers and start house building. All settlers today working on their cellars.

19: ... little rain today, but afternoon as hot as ever.

20: Tractor idle today, angledozer hoist slipping ... meeting of settlers held in the bunkhouse to discuss co-operation.

21: ... hot ...

22: ... building supplies arrived. Eleven houses will be built here in a week or two from now.

23: ... Jack Griffin from Markland coming tonight to look over the tractor and make repairs ...

24: ... Mr. Badcock gone to Bunyan's Cove to interview two men who have written here asking to become settlers ... Mr. Badcock arrived from Bunyan's Cove ... [Two settlers] will have a medical examination and come here as settlers in due course.

26: Mr. Badcock made a trip to Bonavista and was back by 9 o'clock [P.M.]. The men that he had gone to interview were not at home. One had joined up, another had gone in the lumberwoods and the third was away fishing...

27: We have had no rain for a month and all the crops are burning up even potatoes are beginning to wither.

29: Tractor on the bum again ...

30: ... Mr. Badcock received message from [settler] Bunyan's Cove stating that he and another man were coming here as settlers ... The co-operative movement seems to be taking here very good ...

31: Mr. Badcock going to St. John's tonight to clear up the situation re - house building, new settlers and a school ...

August 1: Wet and cold today for a change.
Gerald S. Doyle paid us a visit today and
seemed very pleased and surprised at the
amount of work done here since the start.

5: Mr. Badcock returned from St. John's
today and informed me that three months from
the first of July, the government would
dispense with all Land Settlement Accountants.
So it seems as if at the end of September I
shall be leaving here Final Entry

B. King.

APPENDIX B

Land Development Act 1944

Introduction

Part 1 of this appendix provides some excerpts from an act respecting land development passed by the Natural Resources Department March 20, 1944. The main purpose of the act was to provide the necessary framework to govern the establishment of a land settlement for servicemen returning from World War II. Since no act had yet been passed to govern previously established land settlements, provision was made to have the act apply to land holdings and dwellings in these settlements (See Article 26). Part 2 deals with house ownership and Part 3 with a Land Development Act Amendment.

1. Land Development Act 1944

The following items are quoted from the Act.

Interpretations

"land development area" an area, village or community established by the Commissioner by settling persons on the land for the purpose of clearing and cultivating the soil and promoting rural and fishing industries and shall include, where the context so admits, a land settlement already established and roads leading to or from a land development area

- (4) Crown lands may be reserved and private lands purchased or expropriated for land development
- (5) The Commissioner shall have power to fix the sites of all main roads and by-roads, the boundaries and extent of all lots intended for individual holdings, woodlots, windbreaks, and common pastures, the boundaries and extent of all areas reserved for future extension, the sites of all proposed stores and shops, the sites reserved for all schools, churches, hospitals, wharves and all other buildings ...
- (5) The director shall issue to every person selected and transferred to a land development area as a settler a license for occupation for the term of one year (called the probationary period).
- (9) Rights conferred ... "to occupy and use the dwelling house and land comprised therein for the probationary period for the purpose of clearing and cultivating the said land."
- (19) Provision against assignment of
- (b) No person or his personal representative or his trustee in insolvency shall assign, let or otherwise part with the possession of any land comprised in a grant issued under the provisions of this Act, unless he assigns lots or parts with the possession of the whole of such land, nor shall any person purchase any such land unless he purchases the whole thereof, the intention of this subsection being that the whole of the land comprised in any such grants shall be used as one holding for the benefit of one family.
- (23) Certain special provisions ...
- (a) That the settler shall clear, cultivate and crop their holdings and conserve and maintain woodlots and windbreaks in accordance with a plan approved by the Commissioner.
- (b) That the settler shall follow the technical instruction of the manager of the land development area and the agricultural officer appointed by the Commissioner for the district in which such area is situated.

(26) (a) The provisions of this Act shall apply to land settlements established before the passing of this Act in so far as the same are capable of application thereto.

(c) Grants under this Act may be made to settlers in such settlements who have cleared and put into cultivation at least eight acres of land allotted to them. Provided that a grant may be made to a settler in such a settlement where the Commissioner is satisfied that it has not been possible to clear eight acres of land.

(27) In the case of land settlements established before the passing of this Act, the Crown may in accordance with the procedure set forth in Section 4 of this Act acquire all such lands lying within such settlements....

(37) This Act may be cited as the Land Development Act, 1944 (FOC/NA/81/1944a)

2. Acquiring Home Ownership in Land Development Areas

quoted from a memo by the Director of Land Development
9 November, 1944.

(1) Settlers in Existing Land Settlements

It is recommended that \$50 be set as the amount to be paid by settlers in existing land settlements for the houses which they now occupy.

(2) Servicemen settling in Existing Land Settlements
Under the plan for settlement of Ex-Servicemen on vacant holdings in existing land settlements the land comprised in such vacant holding with the dwelling house and other buildings thereon is made available to the serviceman.... It is recommended that no charge be made to an ex-serviceman who is settled under the plan in respect of the dwelling house supplied him
(FOC/NA/81/1944b).

3. Amendment to Land Development Act (1944)

Under the revised statutes of Newfoundland (1951)
an amendment was passed by the legislature in 1962 to

the effect that land grants issued under the Act (1944) could be returned and replaced by a grant which omitted section 19, the clause which prevented subdivision of land holdings.

APPENDIX C TABLE 1

Total Size of Land Settlement Areas

Settlements	Designated area in acres	Total Acreage Allotted LDA (1944) ¹	Acreage per owner LDA (1944)
Markland	24,960	2,533	36.1
Haricot	860	280	18.6
Lourdes	1,460	260	9.6
Midland	1,250	846	33.2
Brown's Arm	840	574	26.0
Winterland	1,400	315	18.5
Sandringham	550	283	10.9
Point au Mel	1,300	422	12.4

Source: Calculated from Land Development Act Grants (1944), Crown Lands Division

APPENDIX C TABLE 2

Number of Occupied Dwellings and Total Population of Land Settlements 1969

Settlement	Total Number of		Persons per Household
	Householders	Persons	
Markland	60	300	5.0
Haricot	6	18	3.0
Lourdes	65	393	6.0
Midland	51	261	5.1
Brown's Arm	33	178	5.4
Sandringham	40	206	5.1
Winterland	34	125	3.7
Point au Mal	16	83	5.2
Total, eight settlements	305	1,564	5.1

Source: Field Enquiry, 1969,

TABLE 3

Number and Percentage of Householders Using Firewood
in Land Settlements 1969

Settlement	Wood (only)		Wood and other Fuels		Fuels other than wood		Percentage using some firewood
	No.	%	No.	%	No.	%	
Markland	4	7	40	66	16	27	73
Haricot	3	50	2	33	1	17	83
Lourdes	1	2	46	70	18	28	72
Midland	1	2	6	12	44	86	14
Brown's Arm	17	52	10	30	6	18	82
Sandringham	4	10	32	80	4	10	90
Winterland	2	6	30	88	2	6	94
Point au Mal	4	25	11	69	1	6	95

Source: Field Enquiry 1969

TABLE 4

Source and Method of Obtaining Domestic Water Requirements
by Householders in Land Settlements, 1969

Settlement	Securing water from wells, or springs		Carried by bucket		Piped through hose by hand or electric pump	
	No.	%	No.	%	No.	%
Markland	60	100	26	43	34	57
Haricot	6	100	1	17	5	83
Lourdes	65	100	20	32	45	68
Midland	51	100	5	10	46	90
Brown's Arm	33	100	12	36	21	64
Sandringham	40	100	18	45	22	55
Winterland	34	100	10	31	24	69
Point au Mal	16	100	4	25	12	75

Source: Field Enquiry 1969.

TABLE 5

Number and Percentage of Householders Producing Vegetables,
Keeping Livestock and Poultry in Land Settlements, 1969

Producing/ Keeping Settlement	Vegetables		Livestock		Poultry		Some Farm Production		Marketing Some Farm Production	
	No.	%	No.	%	No.	%	No.	%	No.	%
Markland	16	27	11	18	2	3	19	32	2	3
Haricot	4	66	3	50	2	33	4	66	3	50
Lourden	20	31	18	28	4	6	26	40	1	2
Midland	14	27	7	13	1	2	16	30	3	6
Brown's Arm	20	60	13	39	4	12	25	75	4	12
Sandringham	20	50	14	35	10	25	28	70	14	35
Winterland	12	36	5	15	-	-	12	36	10	30
Point au Mal	3	19	5	31	2	13	6	37	1	6

Source: Field Enquiry, 1969

TABLE 6

Agricultural Production of Selected Items
in Land Settlements, 1968-69

Settlement	Vegetables 1968				Livestock 1969					
	Item Unit	Potatoes (150 lb)	Turnip (100 lb)	Cabbage tons	Carrot lb	Cattle No	Horses No	Hogs No	Sheep No	Poultry No
Markland		204	365	28.5	2100	2	10	-	-	2
Haricot		75	16	0.3	-	2	1	1	39	10
Lourdes		164	-	-	30	9	5	6	50	28
Midland		174	48	2.6	200	55	4	-	-	4500
Brown's Arm		600	230	8.1	1725	-	10	5	6	85
Sandringham		3075	1073	71.2	2200	10	15	-	45	103
Winterland		2800	3255	92.3	-	45	3	-	-	-
Point au Mal		70	-	-	50	6	2	1	5	46

Source: Field Enquiry, 1969

APPENDIX C

Table 7

Occupation of Former Land Settlers in Lourdes, 1955-1969

Settler No.	1955	1961	1966	1969
1	labourer	labourer	labourer	-
2	oiler	oiler	retired	retired
3	labourer	labourer	-	-
4	foreman	unemployed	unemployed	-
5	labourer	-	-	-
6	labourer	labourer	labourer	disabled
7	carpenter	carpenter	retired	retired
8	-	-	-	-
9	labourer	unemployed	retired	retired
10	carpenter	labourer	carpenter	unemployed
11	labourer	-	-	-
1 - 11 Commuted to Work in Stephenville				
12	carpenter	fisherman	fisherman	retired
13	-	-	-	-
14	labourer	-	-	-
15	labourer	retired	retired	retired
16	fisherman	fisherman	-	-
17	labourer	retired	retired	retired
18	labourer	retired	retired	retired
19	labourer	fisherman	fisherman	retired
20	labourer	-	-	-
12 - 20 Combined Work in Stephenville with Local Work				
21	truck driver	-	-	-
22	fisherman	-	-	-
23	truck driver	store keeper	store keeper	store keeper
24	store clerk	retired	-	-
25	carpenter	carpenter	carpenter	retired
26	-	-	-	-
27	labourer	-	-	-
21 - 27 Worked Locally				

Source: Electoral Registers 1955, 1961, 1966 and Field Enquiry 1969. Blanks indicate settler deceased or migrated.

Table 8

Occupational Engagement of Sandringham Land

Settler No.	Settlers	1945 - 1966		
	Ca. 1945	1955	1961	1966
1	farmer	farmer	farmer	(1)
2	farmer	farmer	farmer	farmer
3	farmer	farmer	(1)	-
4	farmer	farmer	farmer	fisherman (Labrador)
5	farmer	labourer	labourer	labourer
6	farmer	farmer	(1)	-
7	farmer	farmer	(1)	-
8	farmer/merchant	merchant	merchant	merchant
9	farmer/millman	farmer	farmer	farmer
10	farmer/watchman	(1)	-	-
11	farmer/labourer	farmer	(1)	-
12	farmer/carpenter	farmer	(1)	-
13	farmer/labourer	labourer	(2)	(2)
14	farmer/carpenter	labourer	carpenter	carpenter
15	farmer/carpenter	farmer	farmer	farmer
16	farmer/carpenter	farmer	farmer	farmer
17	farmer/carpenter	carpenter	(1)	-
18	farmer/carpenter	carpenter	carpenter	retired
19	farmer/carpenter	carpenter	carpenter	retired
20	farmer/carpenter	farmer	farmer	farmer
21	farmer/carpenter	(1)	-	-
22	carpenter	carpenter	carpenter	retired
23	carpenter	carpenter	(2)	(2)
24	labourer	labourer	(2)	(2)
25	unknown (ex serviceman)	carpenter	carpenter	carpenter
No. classifying themselves as farmers		<u>12</u>	<u>7</u>	<u>5</u>
(1) deceased		(2) living elsewhere		

Source: Electoral Registers 1955, 1961, 1966, (1945) Field Enquiry 1969.

Note: The above Table does not include the succession factor on the land either as a result of married sons settling or others moving into the settlement on their own initiative.

Table 9

Occupational Engagement of Winterland Land Settlers 1945-1966

Settler No.	Ca. 1945	1955	1961	1966
1	farmer	farmer	farmer	farmer
2	farmer	farmer	merchant	merchant
3	farmer/merchant	(1)	-	-
4	farmer	farmer	farmer	farmer
5	farmer	farmer	farmer	carpenter
6	farmer	(2)	(2)	(2)
7	farmer	labourer	foreman	retired
8	farmer	(1)	-	-
9	farmer	farmer	farmer	retired
10	farmer	(2)	-	-
11	farmer	farmer	farmer	farmer
12	farmer	(2)	(2)	(2)
13	farmer	taximan	fireman	forest ranger
14	farmer	(2)	(2)	(2)
15	farmer	farmer	farmer	farmer
16	farmer	farmer	farmer	farmer
17	farmer	farmer	farmer	retired
No. of farmers		9	8	5
(1) deceased		(2) living elsewhere		

Source: Electoral Registers 1955, 1961, 1966, (1945) Field Enquiry 1969

Table 10

Occupational Engagement of Point au Mal Land Settlers 1941-1966

Settler No.	Ca. 1941-45	1955	1961	1966
1	USAF/Quarry	carpenter	carpenter	carpenter
2	USAF/Quarry	janitor	labourer	(4)
3	USAF	carpenter	carpenter	(3)
4	USAF	(4)	(4)	(4)
5	USAF	(1)	-	-
6	USAF/Quarry	(1)	-	-
7	USAF/Quarry/fishing	carpenter	gentleman	gentleman
8	USAF	labourer	gentleman	gentleman
9	USAF/fishing	taxi-driver	(2)	(2)
10	USAF	(2)	(2)	(2)
11	USAF/fishing	(1)	-	-
12	USAF	plumber	(4)	(3)
13	USAF	gentleman	retired	retired
14	USAF/fishing	taxi-driver	carpenter	carpenter
15	USAF	carpenter	carpenter	(2)
16	USAF	carpenter	carpenter	(2)
17	USAF	(4)	(4)	(4)
18	USAF	clerk	retired	retired
19	USAF	labourer	labourer	janitor
20	USAF/fishing	labourer	gentleman	(4)
21	USAF/Quarry	carpenter	gentleman	gentleman
22	USAF Base	carpenter	(4)	(4)
23	USAF Base	labourer	retired	retired
24	USAF Base	carpenter	carpenter	(2)
25	USAF/Quarry	carpenter	carpenter	carpenter
26	USAF Base	carpenter	foreman	(2)
27	USAF Base	mechanic	(1)	-
28	USAF Base	carpenter	gentleman	(4)
29	USAF Base	(4)	(4)	(4)
30	Quarry	carpenter	retired	retired
31	Quarry	carpenter	carpenter	carpenter
32	(4)	carpenter	labourer	(4)
33	(4)	taxi-driver	labourer	(4)
34	(4)	carpenter	foreman	carpenter

(1) deceased (2) living elsewhere (3) resettled elsewhere under recent Government assistance (4) data unavailable

Source: Electoral Register 1955, 1961, 1969; (1941-1945) Field Enquiry 1969

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