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"THE HUMAN ECOLOGY OF
THE ST. JOHN RIVER VALLEY"

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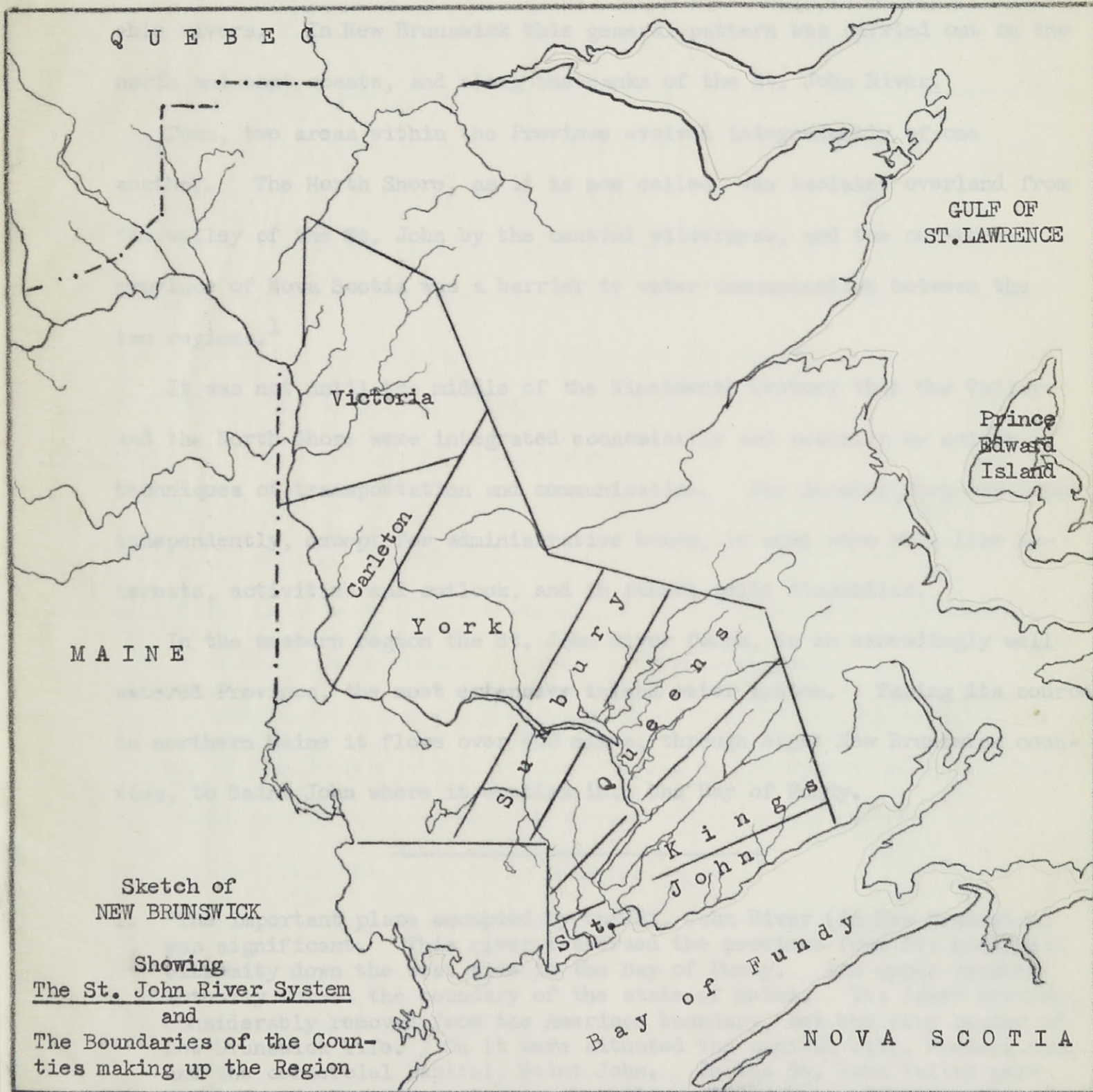
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cut off from the settlements on the North Shore by a vast stretch of rocky and uninhabited territory. History as well as geography had served to separate New Brunswick into two distinct areas. "Striving to be one, the Province was really two, and the parts were difficult to unite." The Maritimes and Canada Before Confederation. Whitaker, E.H. Toronto 1934. page 13.

INTRODUCTION

Historical settlement in Canada was conditioned by water accessibility. As a result, population units became located on the coasts and along navigable rivers. In New Brunswick this general pattern was carried out on the north and east coasts, and along the banks of the St. John River.

Thus, two areas within the Province evolved independently of one another. The North Shore, as it is now called, was isolated overland from the valley of the St. John by the central wilderness, and the out-thrust province of Nova Scotia was a barrier to water communication between the two regions.¹

It was not until the middle of the Nineteenth Century that the Valley and the North Shore were integrated economically and socially by modern techniques of transportation and communication. For decades they developed independently, except for administrative bonds, in some ways with like interests, activities and outlook, and in others quite dissimilar.

In the western region the St. John River forms, in an exceedingly well watered Province, the most extensive inland water system. Taking its source in northern Maine it flows over 400 miles, through eight New Brunswick counties, to Saint John where it empties into the Bay of Fundy.

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1. "The important place occupied by the St. John River (in New Brunswick) was significant. This river traversed the province from its northwest extremity down the west side to the Bay of Fundy. Its upper reaches actually formed the boundary of the state of Maine. Its lower portion, considerably removed from the American boundary, was the very center of New Brunswick life. On it were situated the capital City, Fredericton, and the commercial capital, Saint John. In the St. John Valley were to be found the best agricultural lands. This valley settlement was shut off from the settlements on the North Shore by a vast stretch of rocky and uninhabited territory. History as well as geography had served to separate New Brunswick into two distinct areas. Seeming to be one, the Province was really two, and the parts were difficult to unite." The Maritimes and Canada Before Confederation. Whitelaw, W.M. Toronto 1934. page 13.

At the present time the River is noted for the beauty of its scenery and the opportunities that it presents to vacationists and sportsmen. Beyond this esthetic and playtime value lies a long history of utility, of service to those generations of people, both aboriginal and of European descent, who employed it as an efficient means of transportation, and who lived in the valley through which it flows.

The Micmacs and Malicetes travelled the length of the Province on its surface, the French explorers used it to bring down to the sea the loads of furs that attracted them to the area, and the various British races who settled the Valley utilized it extensively as an avenue to travel and a means of transportation for commodities.

In 1931 this area was the home of 167,795 people, living in cities, towns, villages or in scattered agricultural settlements. To this population the importance of the River as a means of inland transportation has receded with the development of railways, roads and autos.

The changes that these new techniques have brought to the social organization of the Valley, to its economic pursuits, arrangement of people and relationships with other areas have been conditioned and directed by the topography, i.e., the physical environment.

The present study is an attempt to describe the historical development of the social organization, in its more important features, of the population which has lived in the Valley. The study is limited to the period from first settlement to the final destruction of its isolation by the railways which linked it up with the rest of Canada.

The reasons for choosing this particular era are two. In the first place there has been, of recent years, a sizeable number of enquiries,

essays, commissions and reports on the modern position and problems of the Maritimes. In general these are applicable to the Valley, and this modern period has been canvassed fairly well.

In the second place, the materials and data available for a description of the early history of the Region tend to be largely documentary, as opposed to the statistical sources of the modern period. Thus the methodology which would be utilized over the entire history is of a somewhat different order.

A study of the early history of the Region on the present basis may thus become introductory to the more detailed analysis available from improved statistics.

With respect to the general method of the study, it should be noted that, under present conditions, one important feature of the social sciences is the point of view of the student. The orientation of observers towards the same data may be the only distinguishing feature of the work of the economist, political economist or sociologist.

This enquiry into the development of the St. John River Valley is undertaken from the frame of reference of human ecology, a specialized field of Sociology. As a discipline, human ecology is at an early stage of development. In order to ensure an understanding of its point of view the first chapter is devoted to an exposition of some of its basic concepts and ideas.

Chapter 1.

HUMAN ECOLOGY.

1.

The Point of View.

The background of human ecology and the fundamental notions which gave it its initial impetus as a science are set out in the following extract:

"Human ecology drew its material and hypotheses from two sources, first from the human geographers such as Ratzel, la Blache and Brunhes with their emphasis on the effect of the physical environment on the group, and, secondly, from the work of the plant and animal ecologists who were the first to develop the notion of the symbiotic nature of the sub-human groupings, typified by mutual interdependence, reciprocal influence and later by the dominance of some of the members."¹

The geographical influences of climate, soil, topography, natural resources and transportation routes have tended to modify the development of culture and the formation of the social structure in different areas, according to the specific characteristics of the group's habitat.

Such forms of social organization as pastoral, nomadic or maritime have been ascribed to the conditioning influence of the natural features of the environment. Just how far the concept of geographical influence can be carried is open to doubt. It does not appear logical to completely follow human geographers who endeavour to express all of man's environment in geographic terms alone, but, that geography plays some part in the nature of man and the organization of his society can hardly be doubted.

1. Dawson, C.A. Article on Human Ecology in "The Fields and Methods of Sociology", Bernard, Editor.

From the point of view of human ecology the important aspect of the natural environment is how it tends to modify the arrangement of groups of people in space. The primary conception of society is that it exists in the system of relationships which people develop in their gregarious living. This development is contingent upon contact between individuals and between groups, and the resulting processes of interaction which such contacts germinate.¹ Therefore, insofar as the physical environment is responsible to a large extent for the grouping of people, and their consequent ability to interact, it becomes of some importance in the study of sociology.

If ecology were to stop with the study of the natural environment as it is laid down on the surface of the earth it would be hardly more than a comparative geography of human beings, but man has adapted himself to the limitations of the physical environment so well that there now are a host of factors which serve to annihilate the restrictions of nature, to overcome the imposed natural groupings of people and to enhance the means of communication many times. Such adaptations are not part of the natural environment, in the geographical sense, but they are part of the environment to which man now has to fit himself and his society. Such are modern means of transportation, communication and general technical advance in productive enterprise.

The fertility of the soil and good water supply have receded in importance as reasons for the concentration of population within regions. Industry and commerce are the magnets which draw people together now, but these tend to be placed in strategic positions with regard to the natural resources of the area and the lines of transportation.

1. Dawson and Gettys, "An Introduction to Sociology" 1929, page 279 et seq.

11.

The Concepts of Human Ecology.

The concepts of human ecology are, in general, descriptive of the social phenomena of large cities. This results from the fact that a good deal of the early study in the field was located in urban areas. With the increasing interest in the role of regions and inter-regional competition, additional concepts have come into use in describing these larger areas.

In a study such as the present one the fundamental concepts are, perhaps, those relating to the "life cycle", the "physiographic region" and "symbiosis".

The Life Cycle. The concept of the life cycle has been used in regional studies in two ways, viz., as an hypothesis and as a methodological tool for analysis. As an hypothesis the concept puts forward the idea that regions of the same nature pass through similar stages of development.¹

The nomenclature applied to the stages and the dates which arbitrarily mark them off vary with different studies, but the fundamental principles of typical steps or periods in the history of an area remain the same.

As a methodological tool the value of the concept lies in its utility as a means of synthesizing the several lines of enquiry which a regional study necessitates. Having arrived at an approximation of the important stages in the life cycle it is possible to show the interaction of the various factors in the economy, during each stage. Such are agricultural trends, industrial and manufacturing changes, modes and methods in transportation, and the like, as related to population phenomena.

1. cf. Dawson, C.A. "The Settlement of the Peace River Country", Chap. 1.

In each stage the typical trends or situations can be studied and synthesized to obtain as complete a picture as may be possible. This obviates the labourious and generally unenlightening method of following each line of development independently throughout the history.

A Physiographic Region is an area in which the soil, climate, natural resources, and, hence, the basic occupations are of such a unitary character that it may be recognized as being distinct from any other region.¹

Such regional distinctions are made naturally when terms like "The Corn-belt", "The Prairies" or "The Cotton Belt" are used in conversation or writing. They carry with them the notion that the characteristics of these different areas are such that one may be distinguished from the others on the bases set out above.

For purposes of ecology it is desirable to show more clearly the reasons for considering an area a physiographic one. This necessitates the description of natural boundaries, the character of the soil and climate, and the other factors which are unique in the region under consideration.

Symbiosis. Another concept which has wide application is that of symbiosis. The central notion of this concept is that mutual interdependence between regions, or areas within a region, is a corollary of group living. It derives in part from what Durkheim called the "Division of Labour".²

Briefly stated, symbiosis implies that no human group or enterprise exists in a vacuum, unaffected by external changes, and utterly self-sufficient. In a region, the city is a market for the raw materials of the surrounding area,

1. cf. McKenzie, R.D. "The Scope of Human Ecology", in "Methods in the Social Sciences", Rice, S.A. Ed.

2. Durkheim, Emile "La Division du Travail".

or hinterland, and this hinterland is in turn a market for the manufactured goods of the city. Changes in the prosperity or progress of the one affect the system of equilibrium that is set up between the two.

Other ecological concepts will come out in the course of the study, but it is hoped that these introductory remarks will be enough initiation into the ideas and methods of approach. The concepts are part of the frame of reference on which the methodology is based. The accurate exposition of this frame of reference is, perhaps, one of the most important parts of the effort, for it ensures that others will see the picture with the same focus of attention, hence preventing needless criticism and contributing more efficiently to knowledge of the subject.

lll.

Methodology

The methodology of an approach like the present one is by no means rigid or formal. Beginning with the elements of spatial configurations which are most easily treated graphically, i.e., the mapping of all physical data, such as topography, natural boundaries, soil, vegetation, location of population, lines of communication and the like, the description proceeds to the economic and social activities which are modified or limited by these characteristics.¹ Such a theoretical outline implies the presence of whatever data are necessary for the study, and the ready availability of such material. In theory the data can be taken for granted, but in actual

1. cf. Rice, S.A. "Methods in the Social Sciences", Analysis 14.

studies the situation is not likely to be so sanguine.

The present study begins more than a century ago, with the result that the collection and verification of data are one of the greatest obstacles to be overcome. Scientific descriptions of the important phases of human society have come comparatively recently, but this enquiry begins before the country was well enough organized to have even records of the number of people making up the total population.

In general the data assembled here have been drawn from three sources:

1. Census Reports and Year Books.
2. Reports made at various times and by various persons on special features of the Province's activities, as the fisheries, agriculture, etc.
3. Histories and descriptions of travel.

Even if the material provided by such sources were adequate from the point of view of volume of information, there still remains the problem of accuracy and verification. In general it is impossible to check the validity of the earlier data, for the reason that in most cases it is only quoted once, and where it is given in more than one place the chances are that the original source is the same.

The early census figures are open to suspicion due to the fact that settlers of those times connected census returns with the imposition of poll taxes, hence in some cases they were avoided.¹ On the other hand, descriptions and histories almost invariably have a personal bias, which has to be taken into consideration when they are used.

It should also be pointed out that since the region is made up of

1. Appendix 1, Source "G", Note 16.

component counties, the data are only available where given by county divisions, if for the whole Province they can only be used by way of inference, a serious handicap when the census material became so great that larger units were often used.

Chapter 2.

THE SETTING OF THE PROBLEM

1.

The region under consideration is part of the Province of New Brunswick, which is contiguous with three other political areas, the Province of Quebec on the north, the State of Maine on the west and the Province of Nova Scotia on the south. The Province is partly bounded on the north by the Restigouche River and Bay Chaleur, on the east by the Northumberland Straits and the Gulf of the St. Lawrence, and on the south, except for the narrow peninsula which joins it to Nova Scotia, by the Bay of Fundy.

In shape the Province is roughly rectangular, about 210 miles long and 160 miles wide, with the long axis running about north and south. It is the largest of the three Maritime Provinces, covering an area of 27,985 square miles. Much of the interior is taken up by the numerous rivers, lakes and streams, so that the land area is considerably less than the total area.

There is no thoroughgoing description of soils extant, although soil analysis is now being carried forward at the Dominion Experimental Station at Fredericton. The best land in the Province lies in areas of two kinds, intervalles and marshes. Due to floods both of these types receive natural fertilization each year, except where they are dyked, and valuable hay can be grown for a small amount of labour.¹

The land best suited for agriculture occurs in "pockets", or small areas, scattered throughout the Province. Such land is found largely along the coasts and river banks, with land of somewhat inferior fertility

1. Appendix 1, Source "A", Note 1.

lying back of these areas.

The north central part of the Province has remained in a natural state due to the untillable nature of the up-thrust Laurentian shield. Although it is not suited to agriculture this portion of New Brunswick is of value to the tourist trade, and, where it is accessible, for timber.

Along the coast of the Bay of Fundy the land is dominated by relatively high rocky ridges. Deeply indented by many rivers and streams it has sheltered small harbours where fishing and lumbering communities centre.

Climate. Climatic conditions in New Brunswick also vary widely as between the different areas of the Province. At some places they resemble those of England, while in others those of Southern Ontario. As Table 26 indicates, the summer temperature increases as one ascends the St. John River, Fredericton having in general a warmer climate than Saint John.

Counties along the coast, especially those on the Bay of Fundy, are visited with many days of fog during the year, which, in addition to the rocky soil, tends to make agriculture an unprofitable occupation. Further inland, however, the climate does not appear as a barrier to husbandry.

It has been pointed out by Smith¹ that while the Maritime Provinces make up one of the four physiographic regions of Canada, they are naturally part of the New England region of the United States. The logic of this latter division is apparent both from physical likeness, especially New Brunswick to neighbouring Maine and Vermont, and further from the early history of the development of the Maritimes, before political boundaries were so rigid, when activity both economic and social was directed in

1. Smith, J.R. "North America", 1925. Page 62 et seq.

greater proportion towards the American Colonies than to Upper Canada.¹

11.

The St. John Valley as a Physiographic Region.

There were three main physical characteristics of the Valley at the time of settlement which make it possible to classify it as a physiographic region, namely, natural boundaries cutting it off from contiguous areas, the internal waterways, and the forests.

To some extent these characteristics are as much in evidence at the present time as they were earlier, but their unifying qualities have been lessened with technical advances in means and methods of transportation, such as railways and roads. The importance of the water transportation has consequently diminished. The forests have been extensively cut or burned over, and the timber industry is no longer the dominant feature of regional life that it once was.

In spite of these changes a map of the population distribution of recent date shows how the population still is concentrated within the Valley.² Also, in a great many cases, the modern lines of communication have tended to parallel the old roads. Railways run on both sides of the River, and along such tributaries as the Nashwaak and Tobique.

The term "natural boundaries" is, of course, a relative one, and does not imply an absolute barrier to mobility, but rather it applies to sections of the country where movement is difficult, dangerous or more arduous than some other, although longer, route.

1. Appendix 1, Source "B", Note 7.

2. Fig. 7, page 77.

Thus in the case of the Valley the boundaries were roughly of two main kinds, either barren areas where the absence of human habitation discouraged travel, or large indentations of the sea.

To the north the boundary was of the first type. The unpopulated Appalachian region, with an elevation of 500 to 1000 feet, occupies the northwest corner of the Province, extending down to the Miramichi River.¹ This is the highest range of land in New Brunswick, and while providing the watershed for the principal rivers it was a deterrent to mobility north and east of the Valley.

To the south the boundary was the Bay of Fundy, between New Brunswick and Nova Scotia. To the west the scrubland of what is now north-east Maine discouraged settlement, and travel was only accomplished over the military road that entered the Valley at Presque Isle.

Thus the Valley was cut off more or less completely on all sides. The gateway to the area was by way of sea-going vessels through the harbour of Saint John and up the River.

Another feature of the Valley contributing to its unitary character was the system of inland waterways already spoken of, chief among which was the St. John, which runs through each of the counties in the Valley, and provides to all of them a common means of transportation. The importance of this feature will be noted later, in the chapter on the "Pattern of Settlement", so that mention of it in this connection will be sufficient.

The third physiographic characteristic was the presence of the forests which practically covered the entire surface of the Province at the beginning

1. cf. "Canada" D.B.S. 1934, map at page 24 , also Appendix 1, Source "A", Note 1.

of the settlement period. This item of natural resources was thought at first to be inexhaustible,¹ and, although that has not been the case, for a number of decades lumbering was the most remunerative occupation of the people.

The prosecution of this extensive industry by a majority of the population was an additional source of solidarity. Practically all of the lumber was exported to England, hence the attention of the Region was focused on this market, since their prosperity was so closely bound up with its condition.

These three factors, reinforcing one another, provided a subjective, as well as an objective, division of the Region from the rest of New Brunswick, from neighbouring New England, and from Upper Canada. This unity tended to be broken down to some extent with the extension of settlement between Saint John and Moncton, and by railroad communication with other areas, but during the early decades isolation was relatively forceful.

For purposes of study the Valley of the St. John has been considered to include the seven counties of St. John, Kings, Queens, Sunbury, York, Carleton and Victoria.² Madawaska would naturally have been included, except for the fact that it was settled differently from the rest of the Region, its racial majority is, and has been, French, and it has tended to be dominated by Quebec rather than Saint John.

Charlotte County, on the other hand, was directed more towards Maine and American ways, by reason of its contiguity to New England, and since it is not located on the River there was reason not to include it in the Region.

1. Appendix 1, Source "C", Note 1.

2. See Fig. 1.

While it is true that these counties contain areas of land which are not properly within the Valley, their population has clung so closely to the rivers that the people may be considered as living within the bounds of the physiographic area.

Chapter 3.

EARLY HISTORY FROM DISCOVERY TO THE ADVENT OF THE LOYALISTS

The voyage of Columbus to the New World in 1492 started a wave of exploration that brought many of the early adventurers to the shores of what are now the Maritime Provinces. Cartier, Champlain and others came to New Brunswick in the Sixteenth Century, and although most of the French settlement was in Nova Scotia there was some in the former Province. Such settlements occurred, in general, at the junctions of the numerous rivers with the sea, where ships could find anchorage and protection.

Champlain had named the St. John River in 1604, and here at its mouth was one of the first of the French settlements, founded by la Tour for the exploitation of the fur trade, being more in the nature of a fort to protect his interests than anything else. This took place in 1638, and shortly after there were about a dozen small villages and forts scattered along the shores of the Province. The Indians of the area utilized the waterways in their travelling, so that by locating at the meeting of the river and the sea the most economic site in the location of a trading post was effected. The natives could easily reach such a settlement which, in turn, was accessible to ships from the parent country which took the furs back and brought trade goods and life necessities.

Those settlements which were purely for purposes of trade fared better, in the main, than did those which were started with a view to permanent colonization, for they were better equipped, had more resources behind them and were of more interest to their backers because they were producing wealth.

At first the life of these small colonies was extremely difficult. The people were unaccustomed to the soil and climate and had to depend to a great

extent on what they produced, since the supply ships were an uncertain quantity. As enterprises, they were often forgotten by the people who had sent them out, and since they were endeavouring to get a foothold on the land at a time when England and France were at war, the supplies that were intended for them often fell into the hands of the English.

In one way they were more fortunate than the English settlers who came after them, for the French were of the Catholic religion, and it was not long before the priests who accompanied them were able to interest the natives in their religion to such an extent that the settlements were mostly free from the danger of Indian raids.

In this respect the approach of the French to the colonization of the New World was superior to that of the English. It would seem that the Catholic religion was more forceful and of more interest to the natives than the Protestant, and with the untiring work of the priests many of the natives were converted and became the allies of the French in the wars that were to follow.

In addition the French Government was so anxious to make friends of these people that large bounties were offered to French subjects who would inter-marry with them, and many of them did, thus increasing the existing bonds of sympathy.¹

Politically, the country had been handed back and forth so often between the French and English as a result of wars, that most of the time the colonizers could not be sure to which nation the territory belonged. Finally with the Treaty of Paris in 1763 the English obtained permanent possession of North America, or what was then known of it, and the French

1. Gesner, Albert "New Brunswick" 1847, page 49 et seq.

were forced to move their homes to make room for the British troops who were disbanded and settled in various parts of the two Provinces.

The Loyalists

The American Revolution had two important effects on the Region. In the first place it gave an added stimulus to the growing timber enterprises because of the necessity of building up the English Navy. More ships were needed to transport the troops to the scene of action, naval engagements meant loss of ships and repairs, so that the shipbuilding activities in England were increased, and, with this, came a corresponding increase in the importation of timber from the colony.

The second result was the addition of a group of Loyalists to the population.¹ These people were expelled from their original New England homes because of their antipathies to the rebel cause.

The English Government aided them to move to new locations, principally into various parts of the Maritimes and Ontario. In round numbers about 10,000 men, women and children landed at Saint John and St. Anns (now Fredericton).

There were only about 1,800 persons settled in the Valley at that time and as the seat of the Colonial Government was then in Halifax, there was a great deal of delay and hardship before the new-comers were established.

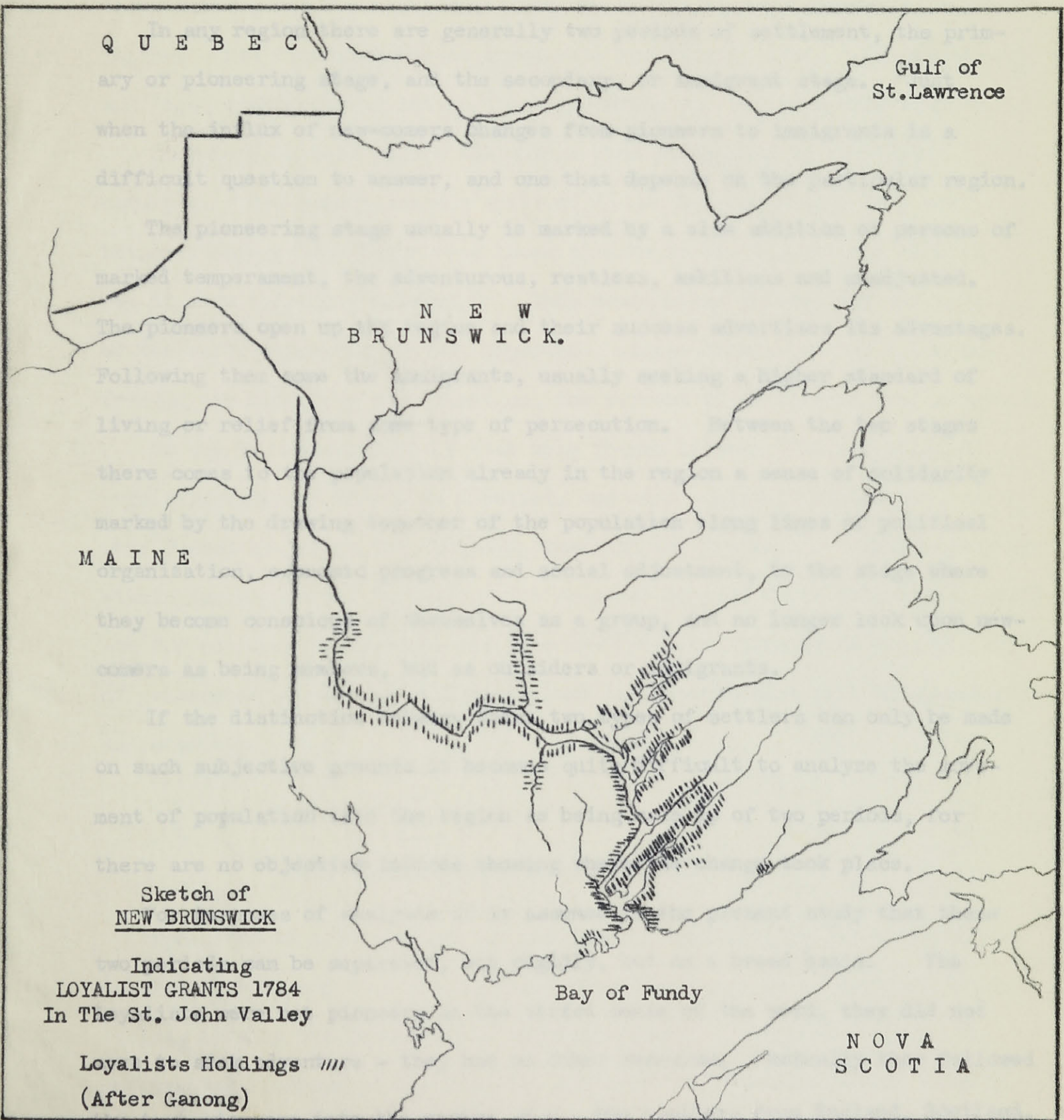
Many of them stayed in Saint John, giving that city its initial population base, while others spread out along the River. The migration of these people was great only in proportion to the small population in the area at that time, but since they brought with them the institutions, skills and

1. Appendix 1, Source "B", Note 1.

manners of a more specialized and advanced area, it is only reasonable to ascribe to them the credit for opening up and organizing the Region on a political and social basis.

From the time of the Loyalists to the taking of the first Provincial census in 1824 there is an absence of recorded history, or descriptions of the events and growth of the Region. In the year following the census, Peter Fisher wrote his "First History of New Brunswick", and from that time forward there is an increasing amount of written material relating to the Region and the Province.

Figure 2.



Chapter 4.

THE PATTERN OF SETTLEMENT

In any region there are generally two periods of settlement, the primary or pioneering stage, and the secondary, or immigrant stage. Just when the influx of new-comers changes from pioneers to immigrants is a difficult question to answer, and one that depends on the particular region.

The pioneering stage usually is marked by a slow addition of persons of marked temperament, the adventurous, restless, ambitious and unadjusted. The pioneers open up the region and their success advertises its advantages. Following them come the immigrants, usually seeking a higher standard of living or relief from some type of persecution. Between the two stages there comes to the population already in the region a sense of solidarity marked by the drawing together of the population along lines of political organization, economic progress and social adjustment, to the stage where they become conscious of themselves as a group, and no longer look upon new-comers as being members, but as outsiders or immigrants.

If the distinction between these two types of settlers can only be made on such subjective grounds it becomes quite difficult to analyze the movement of population into the region as being made up of two periods, for there are no objective indices showing where the change took place.

For purposes of analysis it is assumed in the present study that these two periods can be separated, not rigidly, but on a broad basis. The Loyalists were not pioneers in the strict sense of the word, they did not move to seek adventure - they had no other recourse. Actually they followed the true pioneers into the region, i.e., the settlers from England, Scotland, New England and France, who had been the trail breakers.

The great contribution of the Loyalists in the two decades following their landing was the organization of the institutional background of the Region. New Brunswick became a separate Province in 1784. Political and legal machinery was set up,¹ and education and religion were founded.

Somewhere in this period the change from pioneering to "settling" occurred. New-comers are now referred to as "Emigrants" and they are being encouraged by advice from those already in the Region, who wish to see it more thickly populated.² This distinction between the two types of the early population is not important, except insofar as the types are related to, and throw some light on, the pattern of settlement that occurred.

Of the 71 new settlements that were formed between 1783 and 1819, 62 were expansions of the older Loyalist, and other native, settlements, and 9 were formed by groups from England, Scotland and Ireland.³ Thus expansion within the Region was largely of the original peoples up to this date, (1819), and for purposes of analysis the year 1819 will be taken as marking the end of primary or pioneering settlement, and later settlement will be considered as secondary.

1.

The Primary Pattern of Settlement

From 1783 to 1820 most of the settlements were made on the banks of the St. John River, and to a lesser extent on some of the more important tributaries, notably the Kennebecasis and Washademoak.⁴ Figure 2 (page 21) showing the location of the Loyalist settlements, demonstrates how closely

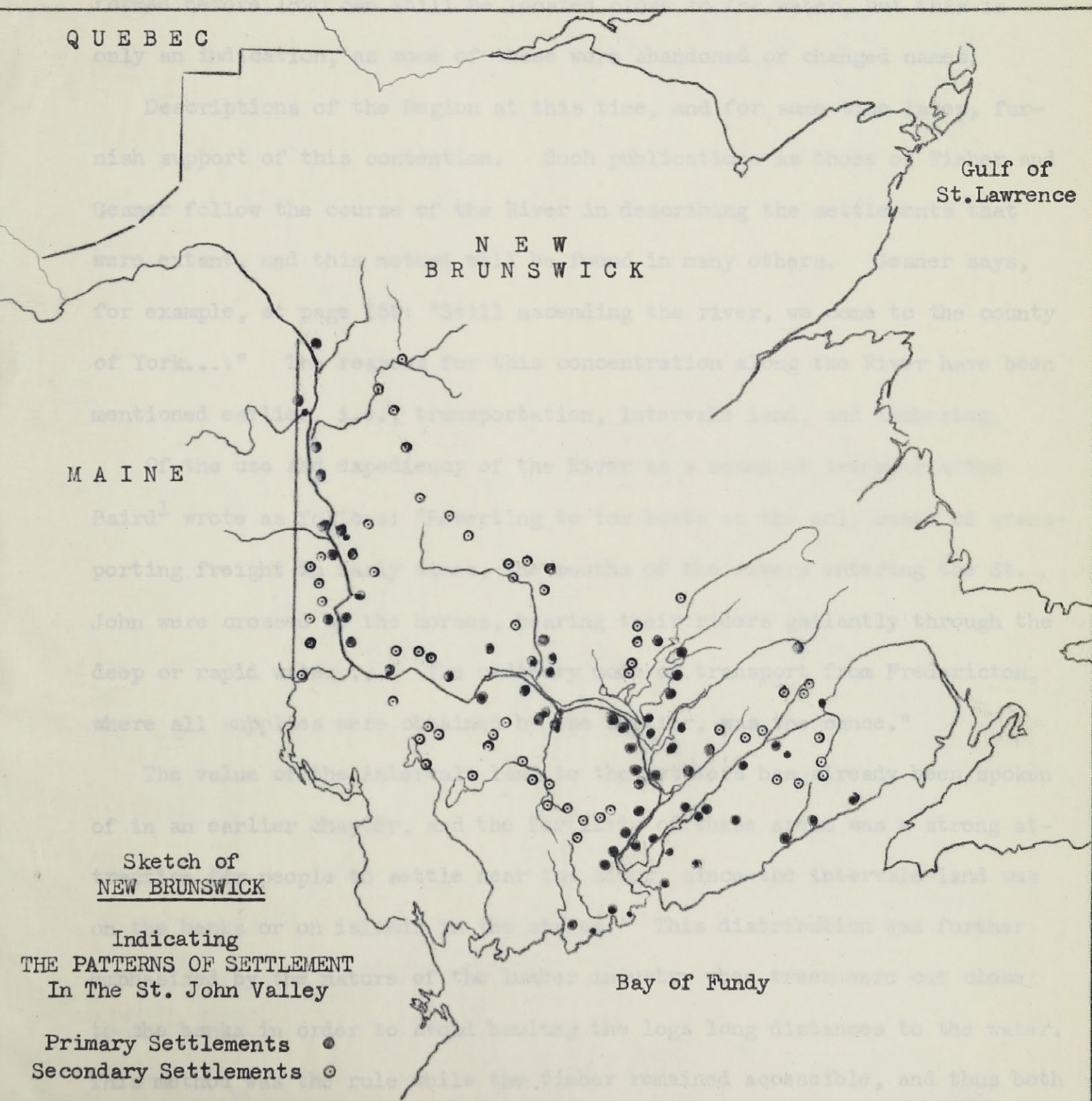
1. Appendix 1, Source "F", Note 6.

2. cf. Fisher, Peter, op. cit. Appendix

3. Appendix 2, Table 2.

4. Appendix 1, Source "B", Note 1 also Source "F", Note 1.

Figure 3.



these were connected with the waterways. The expansion that followed was limited by the same factor. Many of the 71 settlements which were formed before 1820 can still be located close to the water, but this is only an indication, as some of these were abandoned or changed names.

Descriptions of the Region at this time, and for some time later, furnish support of this contention. Such publications as those of Fisher and Gesner follow the course of the River in describing the settlements that were extant, and this method will be found in many others. Gesner says, for example, at page 159: "Still ascending the river, we come to the county of York...." The reasons for this concentration along the River have been mentioned earlier, i.e., transportation, intervale land, and lumbering.

Of the use and expediency of the River as a means of transportation Baird¹ wrote as follows: "Reverting to tow boats as the only means of transporting freight in early times, the mouths of the rivers entering the St. John were crossed by the horses, bearing their riders gallantly through the deep or rapid water.... The ordinary mode of transport from Fredericton, where all supplies were obtained by the settler, was the canoe."

The value of the intervale land to the settlers has already been spoken of in an earlier chapter, and the fertility of these areas was a strong attraction for people to settle near the River, since the intervale land was on the banks or on islands in the stream. This distribution was further emphasized by the nature of the lumber industry when trees were cut close to the banks in order to avoid hauling the logs long distances to the water. This method was the rule while the timber remained accessible, and thus both banks of the rivers and streams were cleared early and opened up for settlement.

1. Baird, Wm. "Seventy Years of New Brunswick Life" 1890, Page 18 also Appendix 1, Source "B", Note 3.

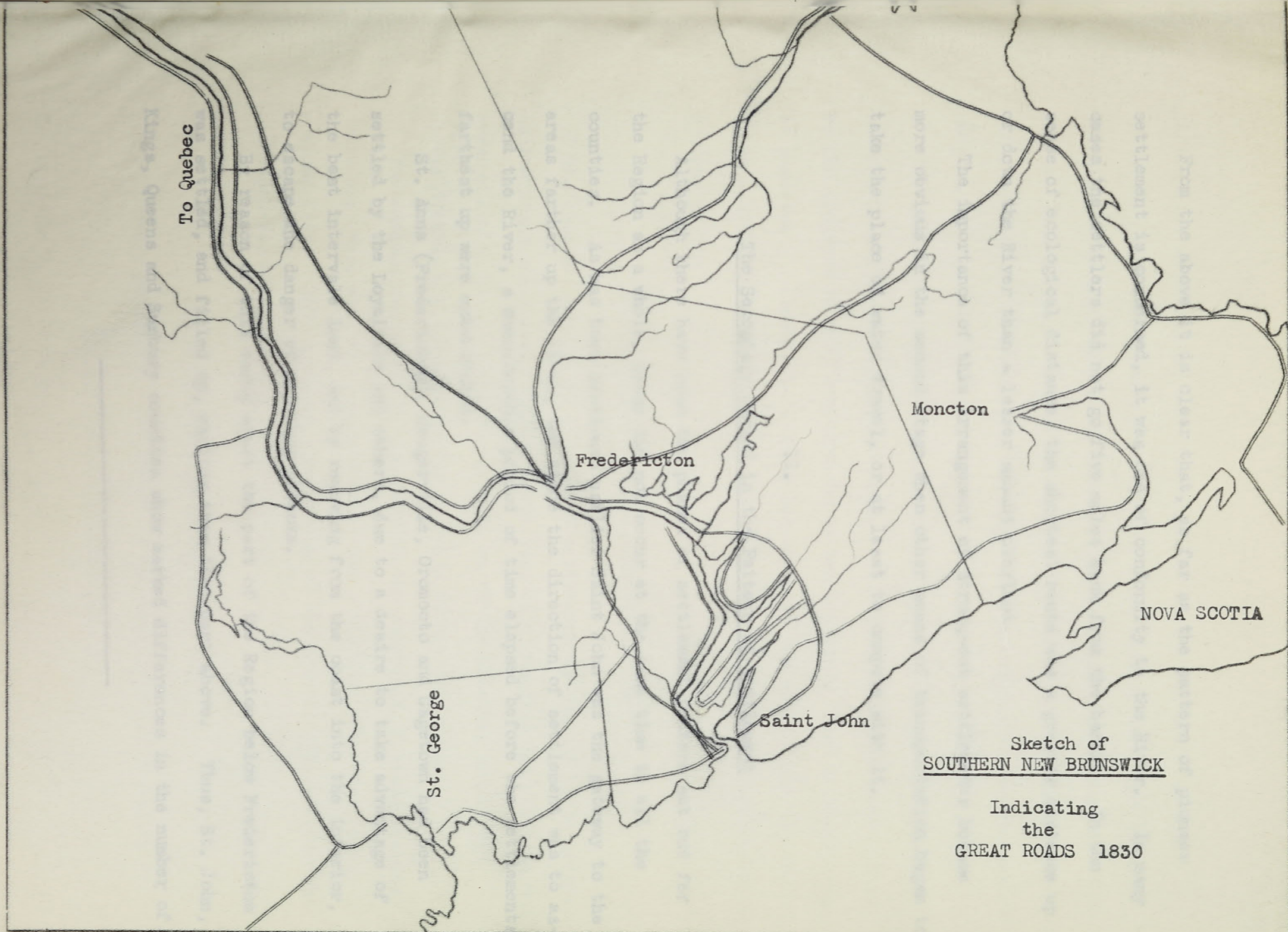


Figure 4.

From the above it is clear that, as far as the pattern of pioneer settlement is concerned, it was one of conformity to the River. In many cases the settlers did not go five miles back from the banks. In the sense of ecological distance, the shortest route was a greater distance up or down the River than a lesser amount overland.

The importance of this arrangement of strung-out settlements became more obvious in the second stage when other means of transportation began to take the place of water travel, or at least to compete with it.

11.

The Secondary Period in the Pattern of Settlement

Although there have been two phases of settlement pattern set out for the Region as a whole, these did not occur at the same time in all the counties. As has been mentioned earlier Saint John was the gateway to the areas farther up the River, and since the direction of settlement was to ascend the River, a considerable period of time elapsed before the settlements farthest up were established.

St. Anns (Fredericton), Mauderville, Oromocto and Gagetown had been settled by the Loyalists and others, due to a desire to take advantage of the best intervale land, and by removing from the coast into the interior, to escape the danger of military attacks.

By reason of this early start the part of the Region below Fredericton was settled, and filled up, earlier than that part above. Thus, St. John, Kings, Queens and Sunbury counties show marked differences in the number of

settlements between 1783 and 1819, compared with York, Carleton and Victoria. The four former counties had about half of their settlements established by 1820, while the latter three had less than one-quarter during the same period.¹ (The counties of Victoria and Carleton were not cut off from York until after this time, but the description of the settlement origins was made at a later date.)

The secondary stage of expansion in the upper counties thus appeared later in time than for the lower ones. This is indicated to some extent by the progress of road construction in the two areas, seen in Figure 4, at page 26. However, for purposes of study the period will be treated as though the changes took place over the same period of time throughout the Region.

Characteristics of the Secondary Period

The second phase of the pattern of settlement was marked by an increase in the means and methods of transportation, by a changing distribution and arrangement of new settlements, as well as by new origins, and by the specialization and differentiation of areas within the Region.

The material necessary to demonstrate the existence of these factors comes more from written descriptions of the times than from statistical or graphic data. This may be a shortcoming of the method, but it is due to circumstances which are now beyond control.

Changes in Methods of Communication

For twenty years after the advent of the Loyalists road-building was

1. Appendix 2, Table 1.

not at all active in the Province or in the Region.¹ Following the War of 1812 there was an accelerated effort to provide New Brunswick with roads which would serve as means of military transport in case of future hostilities. By 1850 there were about 1,269 miles of Great Roads in the Province, approximately 700 of which were in the Region, as well as several hundred miles of Bye Roads, which would be called secondary or country roads today.

The result of the primary pattern of settlement is apparent in the direction and extent of this new method of transportation. With the exception of the Royal Road, which was built to move troops and mail as expeditiously as possible, the roads built during this period closely paralleled the old water transportation routes,² as can be seen from Fig. 4 at page 26. In this way the original pattern of settlement was carried over into the later period, amplified by new means of communication.

One important result of this organization was that penetration into new areas was not accomplished to any great extent. A few stretches of country were opened up for settlement by the construction of roads, but there was no great or striking movement of population coinciding with road progress. The tendency was in the direction of integrating existing settlements, and providing land routes between Canada and the Provinces.

Coincident with road-building came another technical advance which added to the importance of water transportation, i.e., the perfection of steam driven vessels. The first "steamer" appeared on the River in the year 1816,³ and as late as 1861 the number of persons passing up and down the River was 60,000 during the summer months.⁴

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1. Appendix 1, Source "B", Note 3 also Note 15.
 2. Appendix 1, Source "F", Note 3.
 3. Appendix 1, Source "J", Note 1.
 4. Appendix 1, Source "H", Note 2.

The utility of the roads, for local use, was challenged by the presence of the river boats, and the attention of the population was still directed, consequently, towards the primary method of transportation. Therefore, it would seem logical to assume that the building and repair of land routes suffered by the competition with water-borne traffic.

Distribution of Population

The pattern of settlement in this secondary stage was marked by a filling up of the already settled areas, and to a greater extent by location on tributaries and lake systems, with some movement back from the original settlements, which was largely due to the populating of the better lands by the expansion of the first settlements.¹

This second period of settlement was undertaken to a greater extent by immigrants from the British Isles. While the native settlements continued to branch out into new areas they did so at a slower rate than marked the progress of immigrant settlements.²

As was noted earlier most of the settlements of this period took place in the upper counties, hence, the growth in the lower counties was more in the nature of accretion to those already settled, which would be cause and effect of the greater mileage of roads that was noticable in the lower part of the Region.

Coincident with the increasing integration of the southern counties was the appearance of towns and villages heading up small areas of agriculture or lumbering. At various pages Gesner mentions the following as being the

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1. Appendix 1, Source "F", Note 4.
 2. Appendix 2, Table 2.

centre of such areas.¹

Town or Village	Families	Type of Area
Sussex	347	Agricultural and Lumbering
Quaco	200	Shipbuilding and Fishing
Norton	169	Agriculture
Springfield	291	do
Kingston	321	do
Gagetown	133	Agricultural and Lumbering
Canning	120	do
Oromocto	...	Shipbuilding and Lumbering
Woodstock	520	Lumbering and Agriculture

The dominant cities began to appear in this period in the roles which they were to play throughout the great part of the Region's history.² These were Saint John and Fredericton. The former drew tribute from all the Region by the passage of persons and commodities through its harbour. As it grew, specialization began to appear in its occupations and industries. At 1847 the concentration of industries and special enterprises of the following nature were noted;³ iron foundries, steam and water flour mills, saw mills with large number of hands employed,⁴ river boat companies and a canal construction company, as well as banks and insurance offices.

Thus the resultant of the topography and natural resources of the Region on the distribution of settlements produced a pattern which has remained fundamentally the same ever since. The most striking feature of this pattern was the stringing out of settlements along the River and its tributaries.

This spatial arrangement of the people conditioned the lines of transportation and communication that superseded the usefulness of the navigable waterways, which finally were used almost solely as transportation for the

1. Appendix 1, Source "G", Note 4.

2. Page 75 et seq.

3. Appendix 1, Source "G", Note 1.

4. Appendix 2, Table 7.

lumber rafts and for small amounts of agricultural produce.

Roads and railways of relatively great length were developed to serve the more important settlements. After the period of railroad building, New Brunswick had more mileage per person than any other Province.¹

For a great many years following the turn of the Nineteenth Century the Region experienced difficulty in becoming integrated by land routes. At least twenty years must have passed from the time when railways were first mooted till a line was built,¹ and vehicular roads, as pointed out, were a long time in developing to an acceptable stage.

The net result of this situation was the isolation of many areas within the Region after they were settled. River boats were useful enough as means of transporting freight, but mobility of news, ideas and techniques must have been relatively small before the advent of the railroads.²

1. Appendix 1, Source "F", Note 7.

2. Appendix 1, Source "J", Note 2.

Chapter 5.

GROWTH OF POPULATION IN THE REGION

1.

Prior to 1824 statistical descriptions of the numbers of people living in the Valley are extremely limited. Under the French regime censuses were taken at long intervals,¹ which show the small degree of permanent settlement under French rule.

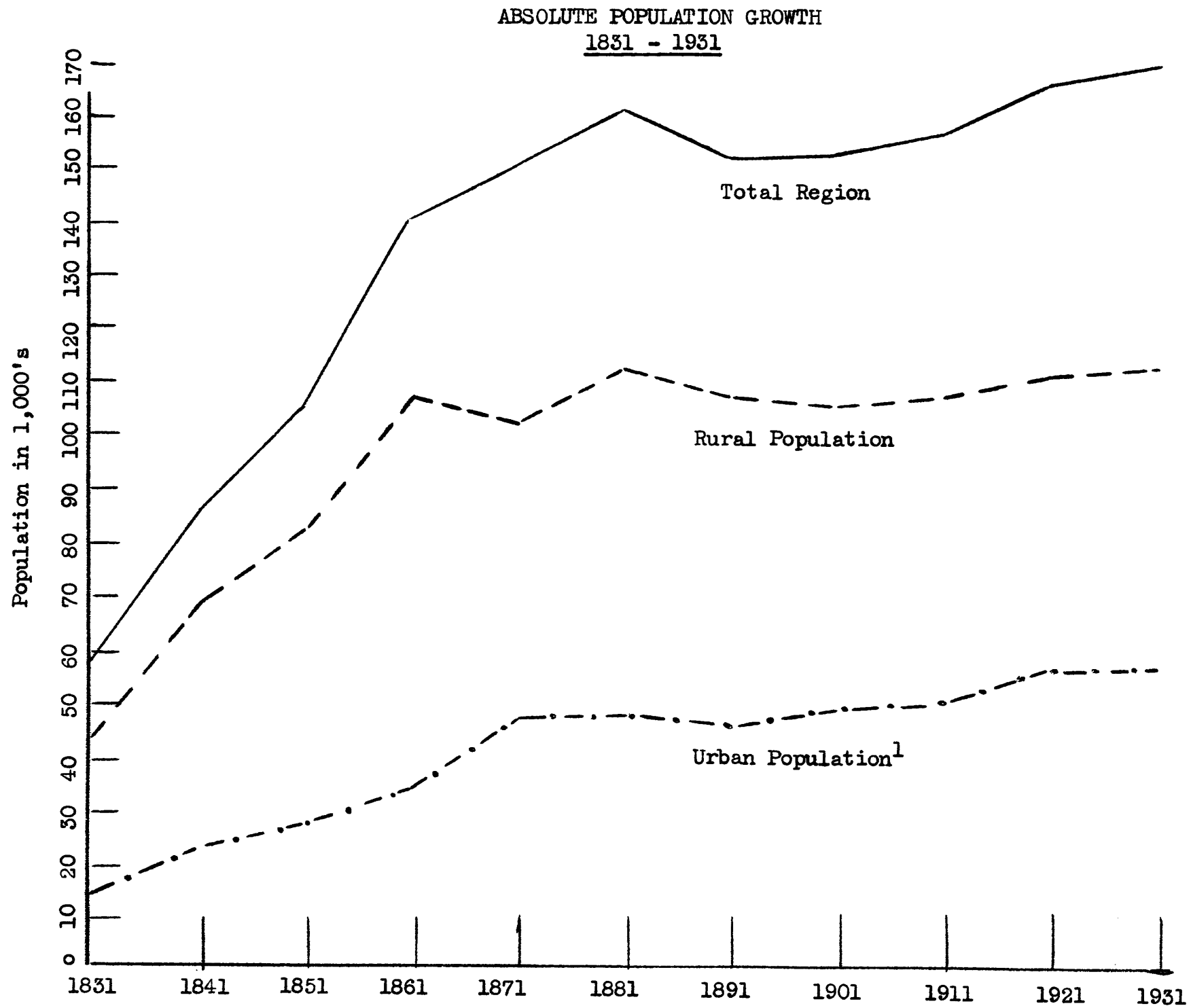
It was not until 40 years after the landing of the Loyalists that a census was taken by the Provincial Government. Thus the rate of population growth during the early history of the Province is largely a matter of inference.

According to the census of 1824² there were about 40,000 persons living in the counties making up the Valley of the St. John River. Just how much of this growth is attributable to immigration is not clear, but it is apparent that immigration was of some importance to population growth, especially after the turn of the Nineteenth Century. The table of immigrants, which follows at page 39, shows 7,000 people arriving in New Brunswick at 1819. In all probability immigration on a fairly large scale began about this time.

From 1824 it is possible to follow the growth and changes in population structure by statistical description. Figure 6 shows graphically the growth of population in the Region for the one hundred years 1831 to 1931. The distinction as to rural and urban populations in the graph is a purely arbitrary one since the populations included under these headings are those of Saint John (which includes Portland up to 1891 when it became part of the City) and Fredericton.

1. Appendix 2, Table 11.

2. Appendix 2, Table 4.



1. Urban = Saint John and Fredericton.

Figure 5.

While there are, at the present time, several other urban areas, such as Woodstock, Marysville, Devon and Sussex, there are no figures for the populations of these towns during the greater part of the Region's history.¹ For this reason they are not included in the long time table of population, since their addition to Saint John and Fredericton at the time when their populations became available suggests that they did not attain urban status until that date, which would be misleading.

The outstanding feature of this data is the decline in population between the years 1881 to 1891, which results might be described as two maximum populations, one at 1881 and the other at the time of the latest census.

The first maximum represents a saturation point in population as a result of the interaction of the attractions of the St. John Region with those of other regions. During the decade 1881 to 1891 more people left the St. John Valley than were replaced by natural increase or immigration.

To say, however, that the Region reached a saturation point in population by 1881 is misleading in that it does not indicate the slowing up process in population growth that preceded the actual maximum. That is, the Region did not add to its population at the same rate each year till the maximum was reached, rather, at some period prior to 1881 the population began to grow less rapidly due to a declining birth rate,² lessened immigration,³ and increasing emigration.⁴

This declining rate in increase is demonstrated in Figure 7, in which the percent gain in population for the total, urban and rural populations, is shown at each decade.⁵ From 1831 to 1841 the rate of increase was

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1. Appendix 2, Table 6.
 2. Appendix 2, Table 9.
 3. See Section on Immigration, page 38 et seq.
 4. Appendix 1, Source "I", Note 5.
 5. Appendix 2, Table 3.

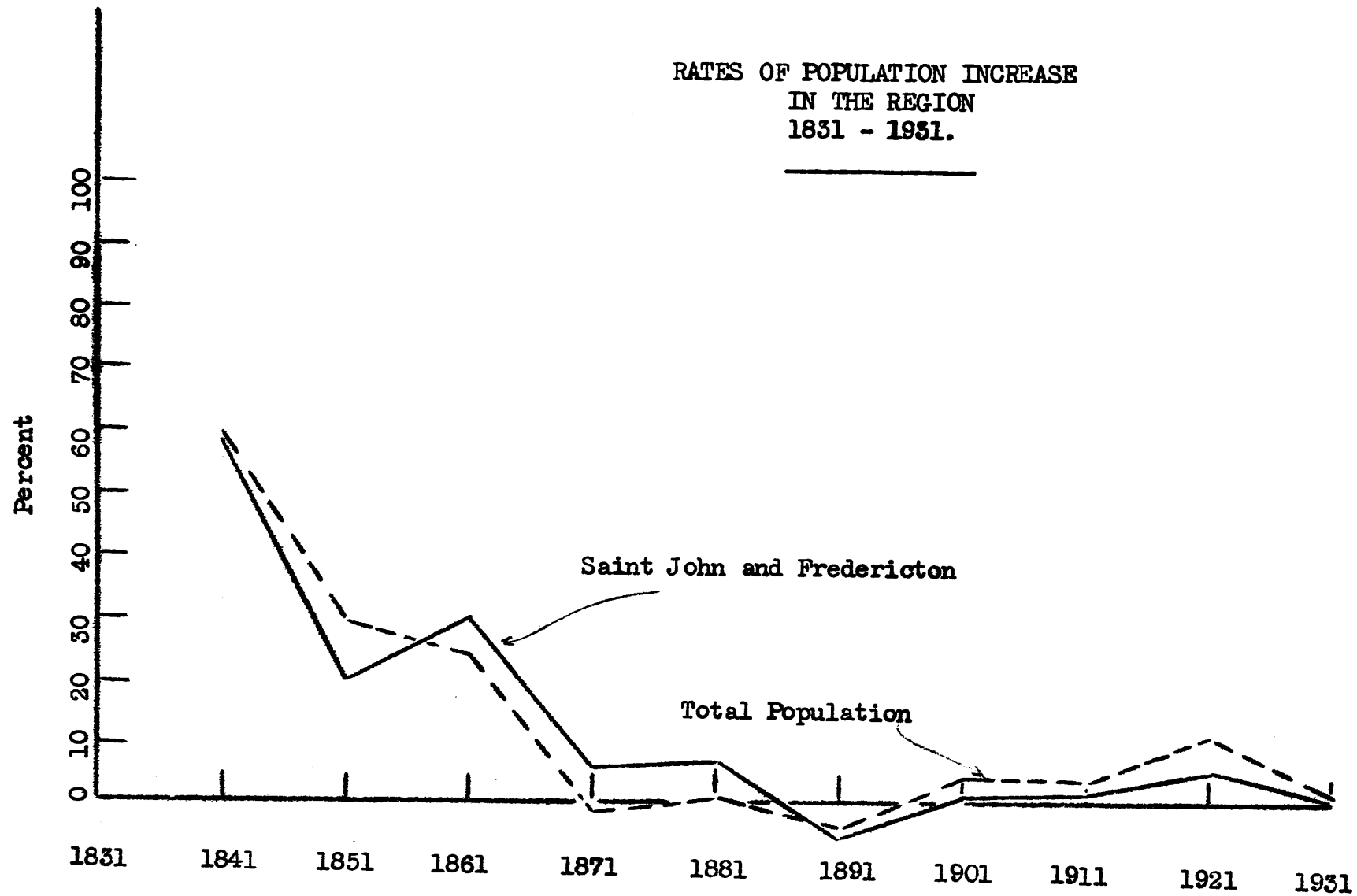


Figure 6.

greatest for the hundred years during which records are available, but from 1841 the rates of increase decline until 1881 when they become negative.

Unfortunately, the data at 1841 are not entirely trustworthy, for reasons set out earlier,¹ and the assumption is that in 1831 the population was greater than the census shows, hence the percent increase for this period is larger than it actually should be.

Taking this error into consideration, it is apparent from the rates of increase for the two decades 1861 to 1881 that these were periods of much slower expansion than those earlier. From this it is possible to infer that the decreasing population expansion, leading up to the saturation point, had its inception between 1861 and 1871, and probably near the beginning of the decade because of the sharp decrease from the preceding ten year increase. (29.5% to 7.0%)²

From 1891 the population as a whole increased slowly for the next 40 years, but the component counties do not all show a trend in the same direction. Of these Kings, Queens, Sunbury and Carleton did not reach, up to 1931, the maximum of 1881.³ Moreover, by deducting the population of the City of Fredericton from the total of York county it can be shown that the postponement of the maximum until 1931 is due to the inclusion of the city in the county figures, thus:

	<u>1881</u>	<u>1931</u>
York County	30,397	32,454
Fredericton	<u>6,218</u>	<u>8,830</u>
Rural York	24,179	23,624

All of the rural counties, therefore, with the exception of Victoria (St. John county is not predominantly rural), reached a point of maximum

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1. See Chapter 1,
 2. For fuller exposition see "The Maritime Provinces since Confederation", Chapter 2, Pages 3-32.
 3. Appendix 2, Table 3.

population by 1881, and had been approaching this limit for a period of about twenty years previous.

The two cities in the Region had a declining population during the same decade as the rural counties, but they continued to gain in population from 1891 to 1931,¹ Fredericton registering an increase of 35.8% and Saint John 21.2% over the 1891 position.

11.

Immigration.

The most rapid expansion of population in the history of the Region occurred prior to 1861. The main factor influencing the rate of growth was immigration, but the greater ratio of births over deaths also had some bearing on this rapid increase.

The first provincial census was taken at 1824, and two more followed, at 1834 and 1840,² before the present decennial year was established in 1851. To make the early records comparable the populations at 1831 and 1841 were estimated by arithmetical interpolation.³

From 1831 to 1861 the rates of increase at each decade were 52.7%, 20.5% and 29.5% respectively, very much higher than any subsequent rates. Due to lack of accurate data it is impossible to assign to either immigration or natural increase the exact importance which each played in the population expansion of this period.

Immigration had received attention by the Government since the beginnings of Provincial history, but it was not till the years around 1820, when the

1. Appendix 2, Table 6,

2. Appendix 2, Table 4.

3. Appendix 2, Table 3. Note: Arithmetical interpolation was used in this estimate as the population showed no sign of increasing by geometric progression.

potato famines in Ireland began, that any large numbers of new settlers appeared in the Province.

From 1819 immigration commenced on a relatively large scale, but the records that remain give only a fragmentary picture of the actual numbers who came to the Region or the Province. The data are lacking in two essential particulars, in that they do not show how many immigrants arrived over the whole period, and of those recorded it is not shown how many definitely remained to settle.

The following figures, taken from two sources, show what information is available on this subject, and indicate roughly the beginning and end of the immigration to New Brunswick.

Numbers of Immigrants Recorded as Arriving in New Brunswick at
1819 and 1826, and for Five Year Periods from 1831
to 1865.¹

<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>
1819	7,000	1841-45	26,049	1856-60	2,258
1826	3,000	1846-50	33,347	1861-65	2,656
1831-35	30,000	1851-55	14,376		

Since this data is not considered to be inclusive no attempt has been made to estimate the total number of immigrants who arrived during this period. At the peak of the inflow, apparently 6,000 persons landed annually, but at least half of these only passed through the Province on their way to the United States.²

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1. Data for 1819 to 1845 from Ganong, W.F. op.cit. page 75, and for 1846 to 1865 from the Journals of the Assembly of New Brunswick, 1867, "Report on Trade and Navigation".
 2. cf. Gesner, A. op.cit. page 318.

Racial Origins and Background of the Immigration

In any migration of peoples there are two factors entering into the process, namely, the "push" from the old country and the "pull" of the new.¹ The presence of either or both of these factors is necessary to overcome the inertia of the people, and to get them to give up a settled and accepted way of living in exchange for hardships and insecurity.

The "push" responsible for the immigration to New Brunswick was the series of potato famines and depressed conditions in Ireland, beginning about 1820. This set of circumstances made it imperative for the destitute peasants to move if they did not wish to starve.

The effectual "pull" to the new land was, without doubt, the availability of cheap passage to the Province via the timber ships that were sailing regularly between the British Isles and New Brunswick. Returning with less cargo than they took over, they offered a comparatively inexpensive method of transportation, and this route naturally appealed to those in straightened circumstances.²

The predominance of the Irish in the immigration to the Region is shown by the fact that 77.4% of the immigrant population living in the Region at 1851 was from Ireland.³ It is of interest to note at this point that the immigrant population in the whole Province numbered 40,000 at this time. Allowing for deaths after landing, this figure indicates that a comparatively small proportion of the immigrants during the thirty years preceding could have actually settled in the country.

The next largest immigrant group to settle in the Region were the English, who formed less than 10% of the total immigrant population at the same period.

1. cf. Reynolds, L. "The British Immigrant", page 5.

2. cf. Gesner, A. op.cit. page 372. See also "British Emigration to British North America, 1783-1837", Cowan, Helen I. University of Toronto Press, 1928, page 18.

3. Appendix 2, Table 12.

Among all the racial groups mentioned in the table, the people from Scotland alone showed a definite predilection for other parts of New Brunswick than the Valley. The Region received only forty percent of the Scottish immigration, the majority of which went to the Miramichi, where countrymen had been established earlier. In every other case more than 50% of the immigrants were to be found in the Region.

Immigrant Concentration

Another interesting feature of the immigrant situation at this time was the concentration of the new-comers in St. John county. According to the census 15,804 or 57.0% of the immigrants in the Region were living in this one area. Of these 12,872 were Irish, and this latter figure represents approximately 60% of the Irish in the Region. A heavy concentration for one country.

The reason for this distribution is understandable on two counts. In the first place since the immigrants arrived in the country largely in a destitute condition, it was reasonable that they were not able to travel much farther than the port of entry had they so desired.

In the second place the great concentration of saw mills and shipbuilding yards was in St. John county during this stage. This provided a labour market for the Irish workers, who, during their early generations in America had always been identified with labouring occupations.

It is further evident from descriptions of the Province at this time that the immigrant population was not attracted to farming, for there was a great deal of agitation on the part of farm owners regarding the high cost of farm

labour.¹ Under ordinary conditions a large supply of immigrants, especially if most of them were very poor, should have depressed labour prices in agriculture. Since this was not the case it becomes further apparent that a small proportion of the immigrants was attracted to farm pursuits.²

As far as immigration before 1861 is concerned, two outstanding groups of people migrated to the Region, the Loyalists and the Irish. It appears that in both cases the movement was the result of pushes from the old country rather than pulls from the new. For the Loyalists, New Brunswick was a haven from persecution, and for the Irish from famine.

As far as the Irish are concerned, immigration gave to the Region a population that was destitute and needed a great deal of assistance in becoming established. In some respects the area acted as a sieve, through which passed the more prosperous or adventurous to the United States, while those that remained largely appear to have done so from necessity. Certainly they were a financial burden for a good many years.³

The fact that the majority of the Irish found employment largely as labourers in the towns and cities, provided the Region with a population that was relatively unstable, having no strong attachments to the land. When emigration from the Region began it was inevitable that this population should be highly mobile, and should have easily left the country.

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1. cf. Johnston, F.W. "Report on the Agricultural Capabilities of New Brunswick", page 54 et seq.
 2. cf. Gesner, A. op.cit. page 372.
 3. Appendix 1, Source "F", Note 5.

Chapter 6.

THE LIFE CYCLE OF THE REGION

As was pointed out in the section relating to the concepts of human ecology, regions experience various stages in the histories of their development which, taken together, make up the life cycle. These stages should correspond to such phenomena as the incidence or decline of major economic enterprises, the succession of ethnic elements, or quantitative population changes that occur within the area.

In general the stages are marked off by dates, indicating the beginning and end of the period. It has been indicated that such dates are, however, purely arbitrary and should be understood as being only useful tools for breaking up the statistical or documentary data.

From the material which has been presented regarding the history, patterns of settlement and growth of population in the St. John Valley, it is possible to delimit the important stages in the life cycle of this Region, as follows.

The history of New Brunswick up to, and for some time after, the landing of the Loyalists, is a story of pioneer settlement with its typical characteristics, such as isolation, lack of institutions and relatively hazardous existence.

This stage began to disappear with the advent of the secondary pattern of settlement (circa 1820), when immigrants formed new settlements, and improved methods of communication began to integrate the different communities, enhancing the extent of social interaction.

This "drawing together" of the population has continued up to the present time, but about 1861 a new factor in Regional life was introduced, namely, railroads. Construction of this new mode of transportation went on for about

forty years, that is, until 1900. The two decades between 1861 and 1881, however, witnessed the growth of railway lines which brought the Region into contact with the rest of Canada. They also are the years when emigration from the Region began. Thus the twenty years prior to 1881 made up a critical period in the history of the Region.

From 1881 to 1901 the whole area of the Maritime Provinces underwent a notable change in economy as a result of coming into direct competition with the Provinces of Ontario and Quebec. The entire development of the Maritimes prior to the building of railways had been as autonomous units looking to England, the United States or the West Indies, rather than to the rest of Canada.¹

The railroads thus ushered in a period of competition between two areas which had had, previously, a minimum of contact. The result of this competition was, as every exponent of Maritime Rights knows, the subordination of many Maritime enterprises to those of "Upper Canada".

While this "subordination" may have continued up to the present, it is perhaps, more scientific to regard the modern period as one of equilibrium between the physiographic areas which make up the present totality of Canada.

In recapitulation, the stages in the life cycle of the St. John Valley appear to have been as follows:

1. Pioneering - From discovery to 1819.
2. Integration - 1820-1881.
3. Inter-Regional Competition - 1881-1901.
4. Modern - 1901-Present.

These stages in the life cycle do not correspond exactly with the classifications generally accepted by ecologists.² The period of out-post

1. cf. Whitelaw, Wm. "The Maritimes and Canada Before Confederation", Toronto, 1934. page 13.
 2. See, for example, Dawson and Murchie, "The Settlement of the Peace River Country", Chapter 1.

settlements has been considered with that of pioneering due to the fact that the data for the early stage of the life cycle is so meagre that it could not be described in enough detail by itself.

The period of inter-regional competition has been included in the classification in order to focus attention on this critical stage in the development of the Regional organization. As the St. John Valley was drawn into social and economic interaction with other regions in Canada the regional centralization that took place was subordinated to the invasion and dominance of centres and Quebec and Ontario .

While it would have been possible to develop the life cycle of the Valley within a classification that has been employed in other studies, it seemed defensible to digress schematically in order to draw attention to the peculiar features in the development of the region under consideration.

Although the modern period is included with the stages of the life cycle in the arrangement set out above it is not developed in the narrative as the other stages are. The reasons for confining the study to the period between first settlement and the growth of inter-regional competition have been discussed in page 3 of the Introduction.

The primary consideration of the thesis is the analysis of the factors which came before the modern period, but which limited and conditioned subsequent development. It has been suggested that the Maritime Provinces as a whole have received considerable attention from students and commissions. In general these studies deal with conditions which have had antecedent causal factors not, on the whole, considered at the time. The present effort is an attempt to describe this causation in relation to natural forces and a natural history of development.

Chapter 7.

THE PIONEERING PERIOD.

1.

Racial Succession

The French, as noted earlier, were the true pioneers of the St. John Valley, as they were of many other parts of Canada. The early navigators such as Champlain and de Monts discovered and mapped parts of the Bay of Fundy and the St. John River. Adventurers of the type of la Tour and Charnisay exploited the fur trade and opened up the area so that a few Acadian peasants could locate on fertile lands and introduce some small beginnings of agriculture.

The censuses at 1695 and 1733¹ are evidence that there were only a very few permanently settled persons on the River at this time, but there were many French adventurers who came sporadically to the Valley to gather furs and fish. The history of these times is almost a list of the enterprises led by numerous Seignors, who had varying fortunes in the direction of attempts to either settle or make money in this new land.

The French, however, did not manage to exclude all other races during this period. British and New England companies made visits to the River, and military sorties were frequent. As a result a racial invasion began about 1760, and an English company was formed at the site of what is now Saint John, in 1764.

With the Treaty of Paris in 1763 the Region was opened up to British settlement, but the first advance was made by a party of Americans from

1. Appendix 2, Table 11.

Massachusetts at Mauderville in 1766.¹ The Acadians gradually withdrew into Madawaska county and to the North Shore area, where their descendants still are found.

The advent of the Loyalists completed the invasion, and by 1784 succession was complete, the origin of the population having changed from French to English predominance.

11.

Occupational Succession.

The typical occupation of the French pioneers of the St. John Valley was the exploitation of the fur trade. This was a matter of bartering with the Indians who paddled down the River with loads of skins which they exchanged for goods of European origin.

The main interest of the exploiters was to make money and return home. As in most pioneer regions fortunes were made and lost quickly. Life was hazardous, and law was largely a matter of personal supremacy.²

The French government, however, realized the value of retaining possession of the new land, and attempts were made to settle the Valley, along with other parts of the Maritimes, but the agricultural pioneers were never very numerous during this period, as was indicated by the censuses, and they were overshadowed by those engaging in court intrigues and jealous rivalry with their compatriots.

These first attempts at settled agriculture were important in that they opened up lands for the settlers who came in the next period, and they showed that agriculture was a feasible project under these unfamiliar circumstances.

1. Appendix 1, Source "G", Note 11.

2. cf. The story of Charles la Tour in "Canada and Its Provinces", volume 13, page 39 et seq.

The earliest English settlements were made on sites where the Acadians had broken the sod.

Thus, the settlements prior to 1783 evidently were founded on such mixed occupations as trading, trapping and agriculture. After 1783 the dominance which agriculture might have assumed was minimized by two factors. In the first place the Loyalist men were not all agriculturists, many of them were artisans or had been engaged in commerce in their former homes. Thus tilling the soil was not a task for which they cared or were fitted.

In the second place lumbering began to assume a commercial importance which grew rapidly until it overshadowed all other forms of commercial enterprise. It was started by "masting" activities, that is, cutting and preparing masts and spars for sailing ships. For this purpose the prevalent white pine was particularly suited.

This pursuit was given great impetus by the various wars that England engaged in after 1783 and by the embargo on Baltic lumber during the Napoleonic war. The Mother Country was forced to draw heavily on the new colonies to keep her Navy in fighting condition and a profitable trade was established in the St. John Valley.

Further occupational specialization began with the building of sailing ships. A start had been made in this respect prior to the arrival of the Loyalists, but after 1783 many small ships were built at Saint John and, to a lesser extent, at other places on the River.¹

Lumbering and shipbuilding were both dependent on the forest resources of the Region, and the market for such products. While these held out the two related industries dominated the commerce of the Valley by their own

1. Appendix 1, Source "D", Note 1.

importance as well as that of secondary industries which were dependent on them.

In the case of the St. John Valley, therefore, agriculture was not the only important enterprise. While the latter is generally the factor responsible for scattering and isolating settlements, lumbering, by the nature of its activities, causes a like effect. Hence in the present cases this particular period of development was influenced nearly as much by lumbering as it was by agriculture.

111.

Isolation.

During this period of development the Region was isolated both internally and externally. Within its own boundaries the River was a saving factor as far as communication was concerned. In summer and winter the inland waterways served as the only means of transportation. Even so, travel was slow and precarious between the settlements that had been laid out over such a long distance.

The Loyalists Regiments had been located as units extending far up the River, so that they would give security to the existing settlements.¹ While this plan was of value to military strategy, it was not viewed very favourably by the men themselves, who did not like the idea of being so far removed from the sea.² In some cases this antagonism was so strong that settlement did not take place as planned, and the upper reaches of the River did not receive all the population that was apportioned to it.

1. Appendix 1, Source "B", Note 11.

2. Appendix 1, Source "B", Note 12.

The lack of communication resulting from this pattern of settlement was observed early, for, immediately after they settled, the Loyalists began an agitation for road building. The provision of adequate facilities was handicapped, however, by the fact that there were so few people scattered over such an extensive area, whose primary effort had to be directed to the acquisition of subsistence,¹

Thus, as far as the ease and efficiency of settlement was concerned, the advent of the Loyalists was not an unmixed blessing. Had their arrival been more in the nature of a slow infiltration over a period of years, the development of the Region might have been sounder and more rapid for the first two or three decades. A slow expansion, in all probability, would have enabled organization to have kept pace with population, and the burden of providing the basic institutions would not have been so imperative.

External Isolation

The difficulties resulting from external isolation were typified by the almost immediate construction of New Brunswick as a province separate from Nova Scotia. This was necessary because of the limitations and delay imposed on the administration of affairs while the seat of the government was at Halifax.²

The actual physical distance of this city from the new province is, of course, the same now as when the Loyalists landed. However, in terms of days of travel necessary for communication between the two, the social distance has been lessened tenfold by modern techniques.

In the same way Moncton was farther away from Saint John than Woodstock,

1. Appendix 1, Source "B", Note 1.

2. Appendix 1, Source "B", Note 13.

for there was no road connection then, although coastwise vessels soon established a contact based on commerce. Quebec was eight days travel from the most remote settlements up the River, and the journey could only be made by persons of a hardy and adventurous spirit.¹

In view of the above it would seem that the kind of isolation typical of this period of isolated settlements in the Region was different in degree but not in kind from that of any similar area. Under ordinary conditions of settlement a relatively small number of farmsteads are found at first, and they are in consequence almost completely isolated. These have, however, been established by pioneers who came prepared for such a situation. As more settlers appear the barriers of space begin to recede in importance and contacts are more numerous. Thus, each small advance facilitates the progress of those who follow, and social organization grows with the population.

In the case of the Valley the advantages of this slow penetration were lost to some extent by the necessity of settling such a large number of people in a very short time. The result was a long period of retarded communication after settlement was established.

IV.

Institutions

Among the indices of social development is the institutional complement. In well organized communities this complement is complete, that is, there are well defined specializations in occupations, religion, recreation, medicine and mutual aid.

1. Appendix 1, Source "B", Note 8.

During the pioneer period the majority of these are absent and the remainder are not in an advanced stage of specialization. In New Brunswick a start was made by the Loyalists in the development of those institutions most necessary for social adjustment, such as, political administration and law.¹ Others, however, lagged behind due to the difficulties imposed by isolation and poverty.

Chief among these was the lack of schools and adequate training for the young. This was considered so serious that many of the Loyalists moved back to New England, after some of the antagonism against them had died down, in order that their children should receive an education.²

Religious institutions got an early start in the Valley, and their presence is well marked in chronicles of the times. The original French pioneers had been accompanied by Catholic priests. The Loyalists, who succeeded the French, brought with them the Church of England, and the service of this institution spread through all the settlements from the very beginning of the Period.

Of other types of institutions there is no definite record during this period. Agricultural pursuits kept the people scattered, except in the vicinity of Saint John, and these, with lumbering, were the main types of commercial enterprise.

Thus the institutional complement was in a rudimentary state during most of this period, but the basis for its expansion had been laid, and within the next forty years the Region developed a full category of institutions during the period of integration.

1. Appendix 1, Source "F", Note 6.

2. Appendix 1, Source "B", Note 16.

Chapter 8.

THE PERIOD OF INTEGRATION
1819 to 1861

1.

Increasing Mobility and Social Organization

The period of pioneering and of isolated settlements was succeeded by an era of expanding population, due to immigration, increasing communication and advancing specialization in industry and manufacturing. During this period the isolation characteristic of the earlier period gave way before the growth of new methods of transportation and greater mobility of goods and persons.

The purely extractive, or primary, nature of economic enterprises was displaced by the growing importance of secondary industries, and by trade and commerce. While this development did not reach the level that it did in Ontario and Quebec, it grew sufficiently to be characteristic of this particular stage in the life cycle of the Region.

These changes lessened the confining influence of the physical boundaries which had formerly restrained interaction within the bounds of the physiographic region. Increasing mobility tended to define the Region on the basis of the limits of interaction resulting from trade and commerce, rather than those of topography and natural resources.

While the pattern of settlement in the Region continued to follow closely the original arrangement of the earlier period, the direction of the interests and pursuits of the people were changed and enlarged.

During this period the Region made more rapid strides in progress and growth, in all probability, than it has since. The main economic enterprise

of lumbering, that had been started in the period of pioneering, became diversified, and many secondary and related industries were evolved. Ship-building brought recognition to the area around Saint John in world markets, but emphasis and reliance on lumber and its products limited the direction and rate of advance after 1819.

11.

TRENDS IN COMMUNICATION

Road Building

For a quarter of a century after the landing of the Loyalists, as was described during the secondary pattern of settlement, the availability of road communication was practically negligible. The construction of Great Roads received an impetus by reason of the War of 1812, when work was concentrated on the Royal Road joining Canada with the sea. The completion of this highway was necessary for military strategy, but after the War attention was turned to other routes, and from this time the construction of roads progressed steadily throughout the Region and the Province.¹

By 1850 there were 1,269 miles of Great Roads in New Brunswick, about 695 miles of which were in the seven counties making up the Region.² At 1866 the mileage for the Province had increased to 2,239 miles, while that for the Region had grown to approximately 963.³

The most important feature of these roads was the fact that they were built to join towns or settlements, and thus followed, to a great extent, the waterways and the early pattern of settlement.⁴ It has been pointed out in

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1. Appendix 1, Source "F", Note 2.
 2. Appendix 1, Source "I", Note 2.
 3. Journals of the Assembly of New Brunswick, 1867, "Report of Public Works" page 68.
 4. Appendix 1, Source "F", Note 3. See also Figure 4. page 26 .

the Chapter on the Pattern of Settlement that the distribution of population changed very little until 1861. The rivers and navigable streams continued to form the basic pattern arranging the population in the Valley, and the advent of roads did little to revise this pattern. The function of roads at this time was not the penetration and opening up new land. They contributed to the integration of the Region by enhancing water-borne transportation.

In addition to knitting together the different parts of the area, road building, during this period, broke down the isolation imposed on the Valley by reason of its physiographic boundaries.

The road connecting Saint John with Moncton and Nova Scotia had been laid out prior to 1812, and was improved as part of the Royal Road. A new road to St. Andrews was built after 1827 from Saint John, and the North Shore was put in communication with the St. John River at Fredericton by a road which followed the Nashwaak and the Miramichi about 1819.¹

As a result of these advances the St. John Valley was brought into contact with the other regions of the Province. There is no statistical description of the amount of travel and communication which roads carried, but their presence alone indicates that interaction between the different areas of New Brunswick was becoming more intense.

Along with the appearance of "Great Roads" came "Bye Roads" or secondary roads. These were built between settlements or penetrated to new areas. In the main, especially after 1850, they were built by settlers in return for grants of land. On the performance of sixty dollars worth of road work and on payment of a three dollar fee the settler procured a deed to the land.

1. cf. Ganong, W.F. op. cit. page 89.

It appears, however, that a great many of the settlers did not fulfill the terms under these conditions. The availability of water transportation, and the cash derived from lumber sales, enabled them to buy land rather than work the grant out.¹

Water Transportation

One of the important reasons why the growth of roads did not bring any great changes to the Region, either in population arrangement or economic enterprises, was due to the appearance of steam vessels on the River early in the Period. By reason of "river steamers" water transportation continued to compete on more than even terms with roads, which tended to be subsidiary to this elementary route.

The first vessel propelled by steam on the St. John River appeared in 1816.² Others followed rapidly and a daily service between Saint John and Fredericton was established while the River was open in the summer.³

By 1861 six steamers were plying between Fredericton and Saint John, carrying an estimated total of 60,000 persons during the summer months.⁴ At 1866 the steamboat inspector at Saint John reported on the condition of 10 vessels engaged in traffic on the St. John and its tributaries.⁵

Steam vessels could make the round trip from Saint John to Fredericton in less than a day, and, from descriptions, the journey was very comfortable.⁶ The speed and ease of such a trip no doubt offered a premium to travellers over the slower and more arduous stage coach travel.

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1. For a description of the road building system, and the results of "Labour Purchase" of land, see Journals of the Assembly of New Brunswick, 1867, "Report on Public Works", page 9, et seq.
 2. Appendix 1, Source "J", Note 1.
 3. Appendix 1, Source "G", Note 7.
 4. Appendix 1, Source "H", Note 2.
 5. Journals of the Assembly of New Brunswick, 1867, "Report of Steam Boat Inspection".
 6. Baird, Wm. op.cit. page 48 et seq.

The transportation of freight by water was, of course, much more economical than by land. For these reasons it is easy to understand how the River continued to dominate transportation in spite of the increase in the availability of land routes.

Water transportation beyond the boundaries of the Valley also became increasingly important. Saint John carried on trade with Moncton, St. Andrews¹ and parts of the North Shore of Nova Scotia⁴ within the Bay of Fundy. Sailing ships from the British Isles, West Indies and the United States carried the products of the Region into a world market, and themselves formed a great part of the export trade.

Thus, during this period, the St. John Valley was predominantly organized along maritime lines, and there is no doubt but that the population was conscious of the importance of water transportation in their economy. The basic commercial enterprises were dependent on these physical features of the area.

It should be noted at this time that methods for the communication of ideas also appeared and multiplied in scope during this era. Up until the time of Responsible Government the postal service had been in the hands of the British authority. When post offices were taken over by the Provincial Government a certain amount of maladjustment and difficulty with administration followed, and postal service and rates were a sore spot in provincial affairs for a good many years. The communication which letters and papers provided was established, however, even though it passed through as troublesome a period as did road building.

The use of telegraph lines apparently encountered little difficulty in

1. Ganong, W.F. op. cit. page 90.

2. Appendix 1, Source "G", Note 2.

becoming established. This was due, in some measure, to the driving force of American capital. Interests in the United States desired communication with the British Isles, and as parts of the Maritimes, notably Halifax and Cape Breton Island, were stepping stones on the threshold of the Atlantic, the growth of telegraphy was fairly rapid.¹

By 1847 Saint John was in communication with the American centres of Boston and New York. Five years later Saint John had lines connecting it with several points in New Brunswick, viz., Chatham, Richibucto, Moncton, Dorchester, Woodstock and St. Andrews, as well as Halifax, Digby, Annapolis and Windsor.

In this fashion the boundaries of the physiographic region were further overcome, and the mobility of ideas was in many directions, where formerly it had been limited largely north and south along the River.

111.

INSTITUTIONAL DEVELOPMENT

Coincident with the increasing interaction, as a result of improvement in techniques of communication, and rising levels of living, the institutional services of the pioneering period² were implemented to a considerable extent during the second stage of the Region's life cycle. The advantages of education and religion were made available to a large proportion of the population, and specialized services began to function in urban areas.³ In addition, a group of unique institutions, immigrant societies, were a characteristic feature of this era not present in any of the others.

1. cf. Whitelaw, Wm. op. cit. page 96.

2. Page 50 supra.

3. Notably commercial institutions and hospitals in Saint John and Fredericton.

Education¹

The difficulties which the Loyalists felt in regard to education were not easily overcome even with the advances in material prosperity after the turn of the Nineteenth Century. The major obstacles were the isolation and the conflict based on sectarianism.² Although the Province early had a reputation for illiteracy,³ it was not until 1847 that a thorough system was set up for the administration, examination and control of schools in the Province.

Prior to this the educational "system" was a conglomeration of individual instruction, private schools, government aided grammar schools in each county and Madras schools. These latter practiced a method whereby the older pupils instructed the younger, hence only one actual teacher or "usher" was employed. The influence of this type of teaching was widespread in the Province for many decades.

Table 30 of Appendix 2 sets out some data with respect to the growth of schools for the decades 1851, 1861 and 1871. While the number of schools only increased from 423 to 486 during this 20 year period, the enrolment shows a much greater increase. The actual average attendance is only available at 1871, but it indicates that just about 50% of the total register was in attendance. However, the Act of 1847 was evidently of value insofar as the numbers of pupils attending school is concerned.

It was not until 1871 that free, non-sectarian schools were established. This mile stone of educational progress was passed after a good many years of sectarian and political strife. Finally the principle, that all should bear the costs of education, was established, and the advance of educational institutions has gone forward satisfactorily since that time.

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1. Sources: "The History of Education in New Brunswick" in "Canada and Its Provinces" vol. 14, page 11 et seq. "The Maritime Provinces since Confederation" pages 135-136.
 2. cf. Gesner, A. op. cit. 324.
 3. Ibid. page 322.

Religion

The increase in the number of churches in the Region is shown from 1840 to 1861, in Table 25 of Appendix 2. Based on the Loyalist migration the dominant denomination was that of the Church of England.¹ Other denominations included Catholic, Methodist, Presbyterian and Baptist. Of the followers of this last denomination Gesner says² "(they are) in general an orderly class of Christians".

The activities of the Church were so varied as to take in many of the institutional services of the present time. Education and mutual aid were appended to the customary religious duties of the different denominations. Such efforts were hampered, however, by the diffused distribution of the population,³ but the function of the Church was dispersed through all the settlements in spite of the difficulties which the spatial arrangement of the people entailed.

Immigrant Societies

Characteristic of this period, of which immigration was a feature, were mutual aid institutions formed for the purpose of aiding the destitute settlers who arrived from the British Isles.⁴ The load which these placed on the resources of the government was too great for it to carry, and part of the strain was taken up by these societies.

Each association bore the name of one of three patron Saints, either St. George, St. Andrew or St. Patrick. Thus the national orientation of each group was proclaimed to all, and immigrants from England, Ireland or Scotland knew where to apply for aid.

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1. cf.. Gesner, A. op. cit. page 318 et seq.
 2. Ibid, page 321.
 3. Ibid, page 319.
 4. See page 42 supra.

While these societies performed a very useful function during the time when immigration to New Brunswick was relatively great, their existence was limited. When the tide of settlers diminished their utility passed and they disappeared from the Regional scene.

Chapter 9.

POLITICAL AND ECONOMIC BACKGROUND
DURING THE PERIOD OF INTEGRATION.

1.

Political Organization.

Although the Loyalists had brought with them the principles of, and belief in self-government, it was many years before the will of the people became actually the instrument of authority in the administration of the Province. The Family Compact dominated the affairs of New Brunswick, as well as the Canadas and Nova Scotia, until 1854.

The agitation for responsible government began in 1840, but fourteen years elapsed before its aims were successful. The progress in political reform was impeded by the general lack of communication, which made any concensus of the whole population almost impossible, and further by the increasing bifurcation of the Province as a result of the appearance of social barriers that began to replace the physical ones of the pioneering period.¹

The Acadian French population of the North Shore region had grown slowly until this area had become largely French speaking and Catholic.² In comparison with the British races of the Province the French group has grown steadily until the present.³ Although there has been some immigration from neighbouring Quebec this growth has been the result of a higher comparative

1. See Introduction, page 1.

2. According to the Census of 1840 forty percent of the Churches in the four counties of Kent, Northumberland, Gloucester and Restigouche were Roman Catholic, while they formed 10% of those in the Region.

3. "In 1881 seventeen percent of the population were of French origin.... In 1921 the percentage of French had risen above 31, and that of the British had shown a corresponding decline". "The Maritime Provinces since Confederation". D.B.S. page 22.

fertility as well as less emigration.¹

The gradual development of this group along the northern and eastern coasts of the Province served to replace the spatial distance between the two areas with social distance based on differences in language, race and religion. This divergence, in the nature of things, was a factor in the political arena and gave to New Brunswick a situation akin to that of Ontario and Quebec.² At the present time public offices of importance are apportioned on a pro rata basis to representatives of the two racial groups.

If New Brunswick did not present a single and unified front during its history the same is also true of the political activities of the three Maritime Provinces. Professor Whitelaw speaks of "early particularism" in describing the relations of these areas before Confederation,³ referring to this fact of the divergence of aims and interests that was so apparent during the first half of the Nineteenth Century.

At the present time the pervasive question of Maritime Rights appears to unite these provinces against the rest of Canada. However, from the time that New Brunswick became a separate Province until 1867 this pooling of interests was not a characteristic of the eastern provinces. For many decades, of course, each Province was, to some extent, an autonomous unit, although the source of authority was actually the British Colonial Office. Each Province had its own tariff regulations and trade between them was conducted on the same basis as, for example, that of Canada and the United States today. At least two of the Provinces, New Brunswick and Nova Scotia, were competing for the same market in lumber and ships. Saint John and Halifax, the respective centres of dominance, were both striving to become entrepôts of the

1. Ibid, page 22.

2. cf. Whitelaw, Wm. op.cit. page 26.

3. Ibid. Chapter 3, pages 7 and 8.

same domestic areas, and also to capture the lion's share of the transportation which their strategic positions on the Atlantic made possible.

Strangely enough, at Confederation these differences were submerged in the common desire to effect rail connection with the Canadas. Prince Edward Island, which was a competitor of neither, assumed the role of outsider, and consistently was opposed to measures which the four other Provinces advocated.

This alignment of forces resulted from the fact that the Island was not impressed by the advantages of either union or an Intercolonial railway. Its separate existence had twice been submerged as a result of being appended, politically, to Nova Scotia. This blow to gubernatorial pride had made the Island population determined to keep their individual existence. Any expansion of the spheres of influence of the other two Provinces threatened their autonomy and was a potential threat to island individuality.

This attitude was intensified by the fact that the Island had been oppressed by a century of absentee ownership which locked up its land and what timber it possessed. Small in area, population and resources, its political inferiority tended to be over compensated by aggressiveness.

In brief, the foregoing is descriptive of the political background of the Region during the period of integration, as well as the relationships that were outstanding among the Maritime Provinces. Viewed from the vantage point of the present the important feature is the discreteness of these areas which are now thought of as a single unit.

11.

Economic Background

While, in general, the first six or seven decades of the Nineteenth

Century were prosperous ones for each of the Maritime Provinces, their economic progress was not entirely smooth and untroubled. Depressions in the lumbering and shipbuilding occupations occurred at intervals, and these had an unsettling effect on the whole economy.¹ The speculative nature of these basic enterprises, due to the instability of the British market, made expansion precarious, and this was the era of Maritime expansion.

In spite of these setbacks markets for the staple commodities of the Region were established in other countries besides England. The British West Indies became importers of fish and lumber products, notably sugar box shooks, and Reciprocity with the United States between 1854 and 1866 provided an important outlet for primary products.

By the middle of the Century the policy with regard to foreign trade had become well established. The great bulk of the exports went to the United Kingdom, and rather more than half the imports came from the United States. In line with all other relationships between the Region and the Canadas there was a very small degree of interprovincial trade.²

As between the different Maritime Provinces this same situation obtained. Although inter-provincial tariffs were somewhat of a hindrance to the exchange of goods,³ the cogent reason was the similarity of exportable surpluses, i.e., ships, lumber and fish. The Region bought and sold on world markets to a greater degree than it has since.

1. "The changes of duty on the Baltic timber, and the high prices given in Great Britain, in 1824, gave rise to great speculations. The market was soon over-loaded with Colonial ships and timber. The result was, that the price of wood fell one-half, many persons were ruined, and the most cautious merchants sustained severe losses." Gesner, op.cit. page 300

2. Appendix 2, Table 16.

3. Gesner, A. op.cit. page 310

Chapter 10.

ECONOMIC ENTERPRISES DURING THE PERIOD OF INTEGRATION.

It has been suggested in earlier chapters that the characteristic feature of the Regional economy during this stage was the symbiotic relationship between the dominant industries, and the relation of these to the physical features and resources of the Valley.

There are two ways in which an industry may dominate an area. It may contribute the greatest proportion of actual wealth to the total production, or, by capturing the interest and imagination of the people, it may seem to diminish the importance of other kinds of enterprise.

In the Region both of these conditions existed side by side. The products of the forest made the greatest contribution to total wealth, but the romance of maritime adventure and the prestige of world reputation in ships and sailing directed the awareness of the great bulk of the population towards shipbuilding and sea-faring.

The evidence for the first statement comes from documentary sources,¹ and also from a comparison of the actual production as reflected in exports.² Unfortunately there is no data to show exports from the Region apart from those of the Province, but it is safe to assume that the former would have actually shown a greater percentage of wood products in total exports than is shown in the total for New Brunswick.³

More than fifty percent of the Region's exports were products of the forest. Next in importance appears ship products, the two making up more

1. Appendix 1, Source "I", Note 3 and Source "D", Note 3.

2. Appendix 2, Table 17.

3. The lumber industry of the Miramichi Valley did not reach, due partly to the fire of 1825, its present importance until after the decline of lumbering in the St. John Valley.

than seventy five percent of the total. It should be pointed out here that not all of the New Brunswick ships actually sold in other countries were included in the export figures. Thus this group was more important than appears.

The evidence for the assumption that shipbuilding captured the imagination of the Region, or more factually that of the southern counties, is to be found in the literature associated, in the past and present, with this activity. Poets and historians have preserved, and to some extent expanded, the attitudes and wishes of a people that was all too aware of ships and sailing.¹ Activities connected with the sea made the greatest imaginative appeal, but lumbering was the backbone of the economy.

The relationship between these two industries is so direct as to need little description.² Shipbuilding, while processing the forest products, added more to the value of the raw material than did lumbering and attracted to it more secondary industries. The two were, however, related in the time of their beginnings, the resources which they utilized, and the era and causes of their decline.

A further symbiotic situation obtained between lumbering and agriculture. Here, as indicated earlier (page 25), the relationship was threefold. In the first place the lumber camps afforded a market for agricultural produce, especially hay.³ In the second place lumbering operations, preceding settlement, cleared land for the farmers, saving them some labour.⁴ Lastly, the occupations of lumbering and farming were far from being mutually exclusive. Rather, it appears that the great majority of farmers had lumber as their cash

1. See e.g., Bliss Carman, Venerable Archdeacon H.A. Cody and F.W. Wallace.

2. Appendix 1, Source "L" . Note 1.

3. "Hay for their (Lumbermen's) teams, is procured from the nearest settlements". Gesner, A. op.cit. page 295.

4. Appendix 1, Source "G", Note 8.

crop, which they cut during the winter and readily disposed of in the spring.¹

So important was this commodity that many settlers took advantage of it to an abnormal extent. They cropped the timber from virgin land on which they had squatted, and then moved on to a new location, when all the available wood was cut on the first.²

Thus, lumbering and agriculture were bound together by contiguity, mutual markets and the same personnel. During the years when the forests were apparently not depletable³ this arrangement was a prosperous one. When finally the exhaustion of pine was recognized as being possible it was too late to prevent the danger resulting from the symbiosis of these basic enterprises.

1.

Succession in the Lumbering Industry

During the pioneering period the provision of masts and spars for the British navy marked the origin of the lumber industry of the Region. For this purpose the tall white pine was the only tree used, and the exploitation of such a concentrated resource came early.

In the exports from Saint John squared timber appeared as the next important forest product. The advantage of the numerous waterfalls on the St. John system was quickly seen and water driven mills were located at the mouths of the major tributaries and at Saint John.

Table 18 of Appendix 2 shows that both masts and squared timber were disappearing from the forest economy by 1820. These were succeeded by wood

1. Appendix 1, Source "B", Note 4; Source "D", Note 3; Source "K", Note 3.

2. Appendix 1, Source "G", Note 9.

3. Appendix 1, Source "C", Note 1.

products which were processed to some extent where they were cut. This change was dictated by several factors. In the first place the introduction of steam power to sawing enabled a mill to be set up where the lumber was most abundant, so that operations could now be conducted back from the banks of the River. In the second place it was cheaper to transport the partly finished product, which was also better preserved.¹

In this way shingles, planks, boards, deals and box shooks gradually replaced the products of earlier decades. One result of this change was the growing importance of saw mills, which soon became located at all the strategic locations in the Region. The expansion of mills occurred in two stages. First by an increase in the numbers,² and later by specialization and increasing personnel,³ as larger single units showed greater returns.

The largest number of mills was recorded at 1861, and the greatest specialization, as shown in the average number of employees, at 1901. It should be pointed out here, however, that the last statement may not be quite correct. Due to changes in the method of census enumeration statistics relating to saw mills are not comparable after 1891. From 1901 an increasing number of plants producing wood pulp are included with the older type of saw mills.

The contribution of the Valley forest to the saw milling industry began to decline between 1871 and 1881, and the lumber industry started its swing to the production of pulp wood. The importation of timber and lumber for certain domestic requirements also dates from about this time. In modern

1. "Mills for the manufacture of timber have greatly multiplied within the last few years. The removal of the exterior part of the logs, by saws, is favourable to the preservation of the wood and by it a great saving is effected in the freight." Gesner, A. op. cit. page 298

2. Appendix 2, Table 8.

3. Appendix 2, Table 7.

times the Miramichi area surpasses the Region in the value of wood products, based on the production of wood pulp. Forest products of many kinds are still part of the economy of the Valley, but it is difficult to isolate their value in contemporary estimates of production, and it is certain that this industry is no longer the dominant one that it was during the greater part of the Nineteenth Century.

It is of interest to note that lumbering, like shipbuilding, was accompanied by certain social phenomena which drew the attention of most contemporary historians. From their records it appears that criticism was directed at the men engaged in this occupation because of the intemperate and convention free lives they led.

As in the case of all exploitive enterprises lumbering necessitated the segregation of men away from the civilizing influence of women and children. In the camps rum and fighting provided the only relaxations. After the spring driving was over the woodsmen went to town, and, in characteristic fashion spent their pay in making up for the things they missed during the winter.

To their contemporaries these men were a source of irritation and annoyance because of their habits. On the other hand the poets and novelists who later glorified the exploits of the "Main John Glazier" would not have had them otherwise.

11.

Shipbuilding

The construction of wooden vessels in the Region was concentrated in the area around Saint John. Although some few small boats were built farther

up the River, in value and numbers they were insignificant compared with those of the former area. The building of small wooden vessels was begun near the end of the Eighteenth Century.¹ The industry grew gradually so that at 1824 something less than sixty vessels were built in St. John county.²

Shipbuilding expanded with lumbering. The great stimulus to the latter occurred during the Napoleonic wars, for reasons already mentioned (page 47). Nearly all of the lumber that was exported went to the United Kingdom, and, as there was a market there also for ships, New Brunswick merchants took advantage of this reciprocal relationship to export both timber and ships at the same time.

Table 20 of Appendix 2 shows the tonnage of ships built in New Brunswick for sixty years. Most of these were constructed in St. John county, and the growth of the industry may be observed in the index made up on the basis of the tonnage built during the five years 1826-30.

The second great impetus in this connection came as a result of the Australian gold rush, beginning about 1850.³ The tide of emigrants, drawn by the hope of riches, created a tremendous demand for ships. Many vessels built in New Brunswick were sold in this market, and at 1858 one-half of the ships sailing from Liverpool to Australia were built at Saint John.⁴

Along with ship construction grew up the carrying trade, in which companies operated vessels carrying cargoes to all parts of the world. During the 1860's a dozen or more companies were operating from Saint John.⁵ Although this business got its start from shipbuilding activities it proved more durable

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1. "Shipbuilding in Saint John commenced in the year 1769-70, when James Simonds built a schooner to the east of Portland Point." Wallace, F.W. op.cit. page 13.
 2. Appendix 1, Source "D", Note 1.
 3. cf. Wallace, W.F. "The Romance of a Great Port", Saint John.
 4. Ibid. page 28.
 5. Ibid. page 30.

than its precursor. By 1880 the days of shipbuilding were over in the Region as the wooden ship disappeared before the competition of those made of steel, but the shipping companies continued their business up to, and in some cases after, the Great War.

When the shipyards disappeared a great many secondary related industries went with them. Rope walks, blockmakers, ship chandlers, sail makers, iron fitters and riggers all were dependent on the activity of the yards. The iron and steel industries were able to adapt themselves to changing times with new uses for their products, but the great proportion of industry that had become part and parcel of the shipbuilding economy passed with the wooden ship.

111.

Agriculture

Despite the fact that agriculture has always been denoted as the basic industry of the Region, as well as of New Brunswick, it is difficult to understand the basis of this statement during the period under consideration. It is true that the census reports apparently show that among the occupations agriculture claims by far the greatest numbers,¹ but in other way is this situation borne out.

That farmers were also lumberers has been demonstrated previously and in St. John county there were also fishermen.² This overlapping of occupations was apparently the rule rather than the exception, and all classes took some hand in the exploitation of the natural resources.

1. Appendix 2, Table 13.

2. "Many of the inhabitants of the coasts and islands engage in agriculture, fishing and lumbering, but, as might be expected they are unsuccessful in each of these branches of labour." Gesner, A. op.cit. page 284.

The actual subordinate position of agriculture is further demonstrated in the tables showing the exports and imports.¹ Again the figures relate to New Brunswick, and only by inference can they be applied to the Region. There is, however, little reason to believe that the facts which they demonstrate are not true for any area within the Province.

Table 17 shows the insignificant value of agricultural exports from all the Province for the years around 1860. This situation obtained after many years of Government subsidy and aid to agriculture, so that if this programme had any effect the agricultural economy must have been less productive in the earlier decades.

Table 5 shows the importance of agricultural imports into the Province. It is noteworthy that hay is about the only major farm product which does not appear on the list, and it is the product which the marshes and intervalles produced with a minimum of human exertion. The farms were not even able to supply the domestic needs of the lumber camps.²

Comparative statistics relating to agriculture and type of farming do not begin until 1881, just about the end of the period of integration.³ For the purpose of showing the position of agriculture in the Regional economy, however, detailed statistical material is hardly needed. From what has emerged regarding the place of agriculture in external trade, and from descriptions of agriculture and agricultural methods,⁴ it is clear that agriculture in New Brunswick was subordinate in techniques, productivity and importance to lumbering and shipbuilding. The "authorities" who described the Province as an agricultural paradise were whistling past the graveyard.⁵

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1. Appendix 2, Tables 17 and 5.
 2. Appendix 1, Source "G", Note 7.
 3. Appendix 2, Tables 14 and 15.
 4. Appendix 1, Source "D", Note 5; and Source "I", Note 1.
 5. Appendix 1, Source "E", Note 1.

This relatively retarded state of agriculture was clearly seen by leaders in public life.¹ By several observers such a condition was attributed to an abnormal preoccupation by the farmers with the timber trade.² There undoubtedly was a connection between these two occupations, but, that this connection was not the whole story is borne out by the situation of agriculture at the present. Now that lumbering has been replaced largely by wood pulp operations dependent on a personnel which is not drawn from the farmers, agriculture should be thus advanced.

Actually, New Brunswick still continues to be an importer of agricultural produce, and it would seem that the factors which are responsible for the relatively low level of farm productivity are to be found in the occupation itself rather than in any extraneous relationships.

IV.

Commercial Enterprises

During the period of integration such financial institutions as banks,³ and insurance companies became located in the cities of Fredericton and Saint John. These were largely local enterprises, dependent almost solely on the prosperity of lumbering and shipbuilding.

Branch ramifications throughout the country, as is the case in the present, were not characteristic of this early stage of development. The financing of commercial transactions was conducted by key firms in each area. Such firms were generally engaged in the lumber industry and besides producing and marketing they also bought large supplies of agricultural and industrial products

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1. Appendix 1, Source "D", Note 5; and Source "I", Note 1.
 2. Appendix 1, Source "G", Note 8; and Source "I", Note 4.
 3. Appendix 2, Table 24.

necessary in their business. This purchasing was apparently extended to needs of the people within the area where they were located.¹

In this way the large lumbering concerns performed the merchandising functions of the wholesaler of the present. Population removed from urban centres were thus dependent on this adventitious service of the lumber industry.

1. cf. "Seventy Years of New Brunswick Life", Baird, Wm.T. 1890
page 18 et seq.

Chapter 11.

THE ROLES OF THE DOMINANT CENTRES
DURING THE PERIOD OF INTEGRATION.

In the symbiotic relationship, one of the interacting elements attains a position of dominance over the others¹ as a result of advantages which geography and physiography have conferred upon it. In a region, such as the St. John Valley, the dominant element is usually a metropolitan area, i.e., the largest city, together with such satellite towns as may surround it.

This concept of dominance is used unconsciously in casual references to the place of London in the English economy, New York in that of the United States, or the rivalry between Montreal and Toronto as to which shall be the commercial and industrial centre of Canada. Each of these cities faces competition from smaller centres since all urban areas strive for population, industry or commercial expansion.

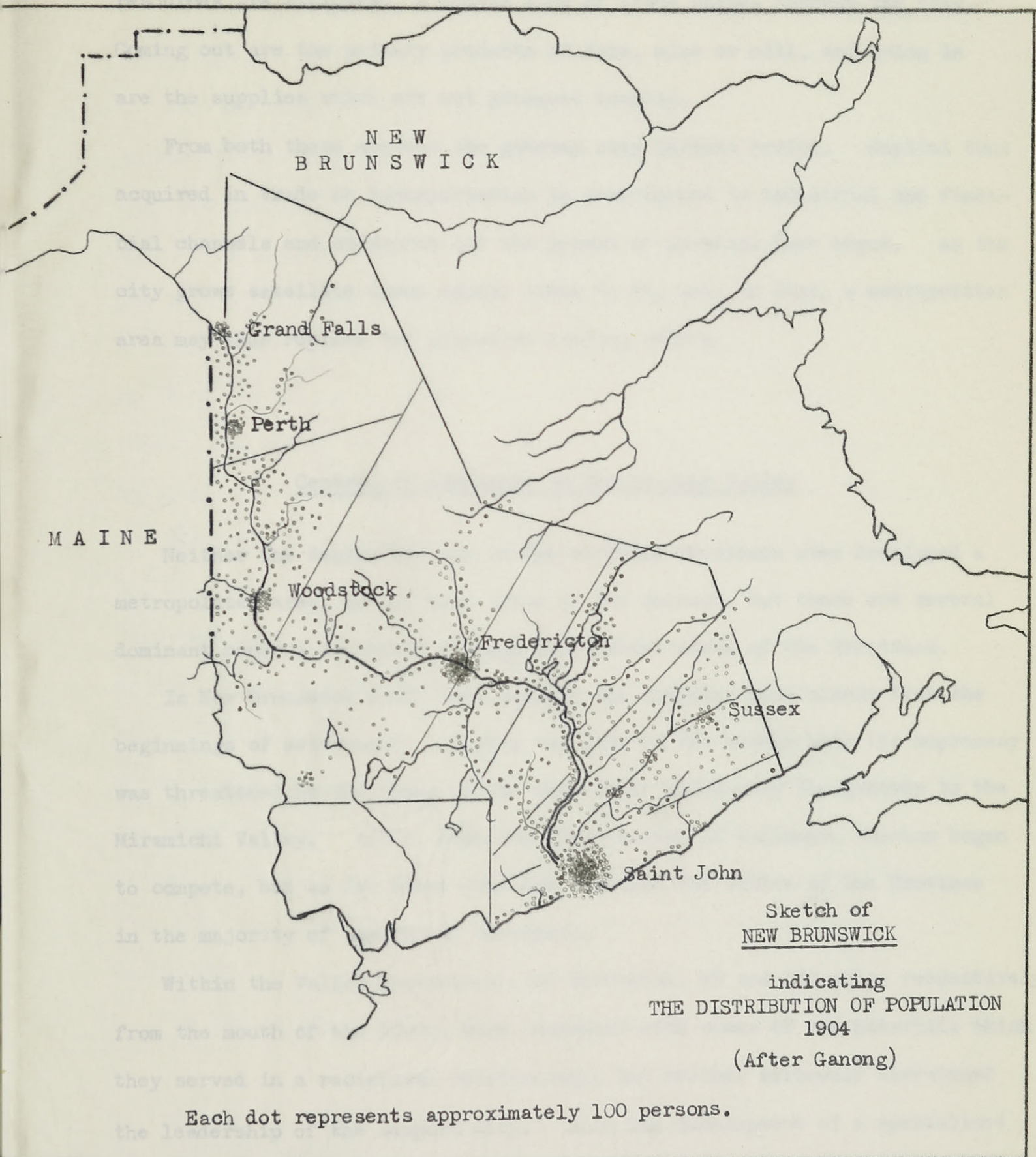
Dominance, used in this sense, does not imply physical superiority of one area over another, but it does relate to the concentration of population, institutions and commercial enterprises within a dominant city which lifts its prestige and influence above those of all competing centres.

The examples of dominant cities cited above are national centres, but dominance is also a phenomenon of the relation between smaller cities and the areas which form their hinterlands. Thus agricultural, mining or lumbering regions are "headed up" by towns or cities which have become the focal points of the activities of the former.

The origin of such a centre usually lies in its strategic position as the gateway to the raw materials which the hinterland possesses. As these

1. Page 4, supra.

Figure 7.



resources are exploited, a double flow of trade passes through the city. Coming out are the primary products of farm, mine or mill, and going in are the supplies which are not produced locally.

From both these sources the gateway city derives profit. Capital thus acquired in trade or transportation is soon turned to industrial and financial channels and expansion and the growth of prestige have begun. As the city grows satellite towns appear close to it, and, in time, a metropolitan area may thus replace the primitive trading centre.

1.

Centres of Dominance in the St. John Valley

Neither the Region nor any of the Maritime Provinces ever developed a metropolitan area, in the true sense of the concept, but there are several dominant centres scattered through the several areas of the Maritimes.

In New Brunswick Saint John assumed the dominant role almost from the beginnings of settlement. During the days of the wooden ship its supremacy was threatened by the towns on the east coast which were the gateway to the Miramichi Valley. Later, with the construction of railways, Moncton began to compete, but so far Saint John has remained the centre of the Province in the majority of spheres of influence.

Within the Valley Fredericton and Woodstock, 80 and 160 miles respectively from the mouth of the River, were connected with areas of raw materials which they served in a reciprocal relationship, but neither seriously threatened the leadership of the seaport city. With the development of a specialized agricultural area in Victoria (potatoes) and the activity in wood pulp cutting,

Grand Falls has made substantial progress as the key to this newer area of expansion.

The advantage in trade and transportation which Saint John enjoyed as the gateway city to the St. John Valley during the period of pioneering, and later,¹ was implemented, after the turn of the Nineteenth Century, by a concentration first of industry and later of finance. From the beginning of the integration period the tendency in the Regional economy was towards an increasing centralization of the industry and commerce of the Region in St. John county, most of which occurred in the City.² Towards the end of this stage of the life cycle the concentration in saw milling,³ shipbuilding,⁴ and finance⁵ can be demonstrated statistically.

Along with this economic expansion the population had also grown, but not much more rapidly than that of the Region as a whole. (In 1831 Saint John contained 28.3% of the Regional population, at 1861 30.2%.) Thus, during this period of general population expansion the dominant city did not grow at a phenomenal rate by any means, in spite of the attractions which commerce and industry provided. Something of a metropolitan status was imparted to the city as a result of the growth of two satellite towns around it, Carleton across the harbour, and Portland above the Falls. In time both of these became part of the municipality and were included as Saint John.

The hinterland of the City was originally that of the Valley, based on

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1. Appendix 1, Source "G", Notes 2 and 7.
 2. Appendix 1, Source "G", Note 1.
 3. Appendix 2, Tables 7 and 8.
 4. Appendix 2, Table 10.
 5. Appendix 2, Table 24.

the export of lumber,¹ and the import of goods that were in demand on the River settlements.² Very soon, however, the City became a market for what agricultural surpluses the lower counties produced, and also that of the areas around the Bay of Fundy, including the northern shore of Nova Scotia.³ With the building of a road to Moncton the whole area around the Bay of Fundy was thus brought under the dominance of Saint John, as well as the Valley, which was the natural hinterland on a physiographic basis.

An industrial hinterland emerged also as a result of the production of the factories and machine shops of the City. Unlike the lumber and ships of this period, however, such products were not exported, but found a domestic market in much the same area as was formed by the purchase of lumber and farm commodities.⁴ In this respect they were clearly secondary to, and dependent upon, the basic enterprises.

11.

Subsidiary Centres

The role of Fredericton in the Region differed somewhat sharply from that of Saint John and other centres. Both its early settlement and selection as the capital of the Province were due to military advantage. Since it was 80 miles up the River it was withdrawn from the danger of war which could only be directed along water routes. When other avenues

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1. Appendix 1, Source "G", Note 6; and Source "J", Note 1.
 2. Appendix 1, Source "K", Note 4.
 3. Appendix 1, Source "F", Note 2; Source "G", Note 6;
Source "K", Note 5; Source "K", Note 6.
 4. Appendix 1, Source "G", Note 10.

of transportation were opened up its position was not so safe, although, as a matter of fact, such fears of aggression proved groundless even at 1836 and 1837.

This isolation from danger, however, gave the capital a position which was, economically, far inferior to that of Saint John.¹ Due to the disadvantages of this position it did not advance in competition with Saint John, but remained definitely subsidiary, economically, to the latter.

The prestige of Fredericton has been drawn more from social, administrative and educational lines than from industry or commerce. During the era of lumbering, however, it was a depot from which supplies were distributed to the camps,² which however, were bought from Saint John. With the depletion of the forests the City retained its situation as a market for, and supplier of, much of the agricultural districts in York and Sunbury. A glance at the trend of its population over the century from 1831 to 1931 shows how little its situation has changed over this period of time.

Mention has been made earlier of smaller centres which served agricultural or lumbering areas in much the same fashion as did Saint John and Fredericton.³ While such towns or villages served a useful purpose, and have displayed a marked tenacity of existence, they did not assume urban proportions during the period of integration.⁴

Intermediary between the conger of dominant city, subsidiary towns and trading villages already mentioned, and the scattered agricultural settle-

1. Appendix 1, Source "G", Note 6.

2. Appendix 1, Source "G", Note 7.

3. Page 31, supra.

4. Appendix 2, Table 6.

ments were the lumbering villages. These were characteristic of this period, as in all lumbering areas. When the mill was set up to begin cutting operations a floating population of sawyers, mill wrights, blacksmiths, labourers and the like came with it.¹

Around this market for agricultural produce appeared farms and a farm population, and soon the pedlar began to make his rounds as the first marketing agency. Bye roads were built to the more important of such settlements by statute labour, and gradually the settlements were drawn together and other services appeared.

The mill village was, however, dependent on the lumber trade for existence, and thus could not expect a continued existence. At one time the mouth of every large stream flowing into the St. John was the site of one of these villages, but at the present about the only indications of their presence are the remains of sawdust piles.

3.

The Results of Urbanization on the Population Structure

The growth of Saint John and Fredericton was accompanied by a sorting out of some elements of the population structure within the Region. This contrasting construction of city and country populations with respect to such factors as age, sex and ethnic origins is found in all areas which have a rural and urban dichotomy, but differences in population structure which the urbanization process creates may not always occur among the same elements. Some cities are noted for the concentration of old people, some for the

1. Appendix 1, Source "K", Note 3.

greater proportion of females, or others, again, for the small numbers of children. As indices of urbanization, however, distinctive quantitative differences between sexes, age groups or origins are always present.

With the increasing detail of modern census returns it is possible to make accurate analyses of the results of this process as they are reflected in population statistics. Such analyses are, however, based on standard and comparable age groupings, usually of five years, but it was well after the period of integration that such a system was available in the New Brunswick Census.

The first three censuses of the Province grouped the population into two age classes only, those over and under sixteen years of age. At 1851 and 1861 a somewhat different scheme was used. The groups at these years were, 0-6, 6-16, 16-21, 21-40 and so on. It is apparent that these classes are not clearly defined and not of uniform size throughout, prohibiting detailed comparisons. With this sketchy material it is possible to demonstrate to some extent the arrangement, in the Region, of population elements as a result of the urbanization process.

Sex Distribution

The disparity between the sexes which is typical of pioneering in all regions probably was not so pronounced in the St. John Valley, due to the fact that both the Loyalist and Irish migrations were largely made up of families rather than individuals. No data is available between 1767 and 1824 as to the proportion of the sexes, but at the former date there were 134 men to 100 women, according to the census of that year.¹ At 1824,

1. Appendix 2, Table 11.

roughly the beginning of the period of integration, the ratio was 114, a proportion which was not exceptional considering the exploitive nature of basic industries.

This proportion fell gradually until 1871, when it became 103. From 1871 to 1931 the ratio remained almost constant.¹ Thus the predominance of males over females that was present at the beginning of the period had disappeared shortly before it closed. In other words the Valley had reached a stage of maturity with respect to the equilibrium between the sexes about 1871.

The refinement which the use of age groupings adds to the analysis of sex distribution is shown in Table 27, for the period 1824 to 1861. This material demonstrates the result of immigration on the relative numbers of the sexes as well as the polarizing effects of the urban areas. The greater ratio of males over females at the first date for which material is available indicates to what extent single males had immigrated in the years previous.

For all of the counties this ratio declined between 1824 and 1851, in spite of the fact that immigration was at its peak during these years. From this index alone it would seem that immigration by males only was relatively small. This is seen more clearly if the movement of females to the cities is taken into consideration at the same time. This shift of sexes within the Region, supposing no immigration or emigration, would cause an apparent concentration of males in areas from which the females emigrated, and hence, an increasing male ratio.

Since the trend of females to the cities was a fact, and the increasing sex ratio for males was not a fact, even with immigration, it appears that

1. Appendix 2, Table 28.

the preponderance of males was only a carry-over from the period of pioneering. During the stage which followed, the trend was towards equalization of the sexes, within the Region as a whole, but increasing disparity as between the urban and rural areas.

The decade 1851 to 1861 does not quite follow the above pattern, here there was apparently some increase in the actual number of males as a result of immigration. All of the counties, with the exception of Victoria, registered increases in the proportion of males over females as between the beginning and end of the period. Apparently the type of immigration for this decade was somewhat different from those which preceded it.

The movement of females, over the age of fifteen, to urban areas, which has been mentioned above, evidently began between 1824 and 1834. Saint John had a sex ratio of 100, or very nearly equilibrium,¹ and Fredericton was still definitely male in structure with a ratio of 112 at the year of the first census. At the next decade each city shows a trend towards the concentration of women. The ratio in Saint John being 91 and in Fredericton 97.² This urban trend also continued up to 1871 and became relatively stable after that year.

The force which attracted women to the cities was, apparently, the emergence of occupations such as domestic service, dress making, millinery and the like, which were preeminently filled by the one sex. Although there is no material to indicate this situation until 1871, at this date an enumeration of trades in the Census³ shows that there were 3,401 persons engaged in these patently female positions. Of this number 2,038, or 60% were located in Saint John and Fredericton.

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1. There are more male than female births, hence more men than women until late age, when the higher mortality among men equates the numbers of the sexes.
 2. Appendix 2, Table 27.
 3. Census of Canada 1871, Vol. 2, page 322, et seq.

Of the total persons gainfully employed in the Region at this time, numbering 47,812, only 12,296, or approximately 26%, were to be found in these two cities. Thus, while female occupations showed a concentration of 60% in urban areas, all occupations showed just 26%. The basis, therefore, of the movement of women to the cities seems to have been that these areas offered employment in occupations which rural areas did not provide.

Age Distribution

Table 29 shows, at the various censuses between 1824 and 1861, the proportion which the age group 0-15 years formed of the total population. In nearly every case this percentage declines after 1834, indicating that the population less than sixteen years of age became smaller, relative to the total population, at each succeeding decade.

This trend might be explained by the operation of three factors. First, by the emigration of the population under sixteen; second, by the immigration of adults, or, lastly, by a declining birth rate. In view of what has been said with respect to the sex ratios it is doubtful if either of the first two factors was the effective one. What remains is the assumption of a falling birth rate. This explanation is substantiated in some small measure by the fact that the birth rate, based on a very rough index taken at the one year of census enumeration, declined from 1851 to 1861.¹

In view of the general uncertainty of the data, however, the analysis regarding the ages of the people can not be carried very far with confidence. In the table there does appear a difference between the percentage of the population aged 0-15 years in Saint John and Fredericton as compared to the

1. Appendix 2, Table 9.

various counties. In general the cities show a somewhat smaller relative population in this age group, which would follow from a concentration of adults, as was indicated from the sex ratios.

Distribution of Ethnic Elements

The main features relating to the stratification of ethnic groups within the Region have been indicated earlier.¹ What was observed in this respect was the concentration of immigrants in the county of St. John. The limitations of the material dealing with the origins of the immigrants at 1851² prevented any analysis of the make up of the population in the cities as far as race or nationality was concerned. However, it appeared from other data that the location of the majority of industrial enterprises in the cities drew to them the great bulk of the Irish, who, as has been noted, were attracted by labouring occupations to the exclusion of practically all others.

Here again the paucity of quantitative material limits the extent of the description of this phase of population distribution. What little has been indicated from the various data is only the most apparent effects of the urbanization process as it sorted out and stratified the Irish group into urban areas.

1. Page 41, supra, et seq.

2. Appendix 2, Table 12.

Chapter 12.

RAILROAD DEVELOPMENT DURING THE PERIOD OF INTEGRATION

The development of railroads in New Brunswick was an activity in which all the Province participated, so that in one sense a Regional resume of railway construction is too limited. However, it is true that in New Brunswick the first lines were built in the western half of the Province, and that the interests of the two regions of the Province were not one with regard to the location of routes. The St. John Valley and Charlotte county were interested in the short line to Montreal which would give, it was hoped, the port at Saint John the trade of Canada which was being routed through Portland.

The eastern region, on the other hand, was interested in the development of the Intercolonial, which was eventually constructed to run along the North and East coasts, linking up several small commercial towns, such as Bathurst, Campbellton, Newcastle and Dalhousie. The Intercolonial brought this area into contact with Halifax, for its terminal was this latter city. Thus the building of these two inter-provincial railways further widened the gap between the two areas of New Brunswick. Halifax and Saint John were competing for the same transportation economy, and the construction of the Intercolonial tied the north shore of the Province in with the city which was directly arrayed against New Brunswick's commercial capital.

The actual development of railways in New Brunswick was spread out over more than two generations. The first real agitation for this service began in 1835, but it was not until 1890 that the main lines were finally constructed. Work went on from 1851 until the beginning of the Twentieth Century, but the rate of development was quite slow.

Figure 8.

The main regions for the construction of railways in the early years of settlement were

the Province of New Brunswick, the Province of Nova Scotia, and the Province of Prince Edward Island.

The construction of railways in the Province of New Brunswick was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Nova Scotia was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Prince Edward Island was

of considerable importance in the early years of settlement.

The construction of railways in the Province of New Brunswick was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Nova Scotia was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Prince Edward Island was

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The construction of railways in the Province of New Brunswick was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Nova Scotia was

of considerable importance in the early years of settlement.

The construction of railways in the Province of Prince Edward Island was

of considerable importance in the early years of settlement.

The construction of railways in the Province of New Brunswick was

of considerable importance in the early years of settlement.

Sketch of
NEW BRUNSWICK

indicating
LOCATION OF MAIN RAILWAY
LINES BY 1890
and when construction was
completed.

They were built in general to serve communities or settlements that had been
already established.

1. of. Whitelaw, W.M. op.cit. page 93.

2. Ibid. page 257.

3. Ibid. page 95.

4. Tanong, W.F. op.cit. page 105.

The main reasons for this drawn-out era of railroad building were three in number. First, the relative low density of the population in the Province which was scattered out along the provincial rivers. Second, the lack of unity between the two areas of the Province; and lastly, a comparable lack of harmony in the interests of the three Maritime Provinces.¹ The construction of railroads was too big a financial burden for the Provinces to assume by themselves, and they had to have either the financial aid of Ontario and Quebec or of England. The role of the latter was limited, in the main, to the guaranteeing of such loans as the Provinces floated for this purpose, and the general supervision of the routes. This supervision was carried on with an eye to the aspects of Empire defence which the different roads presented.² As a result the ideas of the Colonial Office were not always those of the Provinces.³

Figure 8 shows the approximate location of the more important railroads by 1890. From this sketch it is apparent that the pattern of settlement, as dictated by the physiographic features of the Region, was impressed on the routes of this newest means of communication. The line which eventually joined Saint John with Montreal followed the River Valley from Edmundston to the Bay of Fundy. The road which connected the former city with Halifax also followed the Kennebecasis valley for most of the route in Kings county.

As with roads during the period of integration, railways developed very few areas of settlement. The changes in population distribution were relative to the establishment of villages at stations and to one or two small towns like McAdam, where railway repair shops concentrated population.⁴ They were built in general to serve communities or settlements that had been already established.

1. cf. Whitelaw, W.M. op.cit. page 93.

2. Ibid. page 257

3. Ibid. page 95

4. Ganong, W.F. op.cit. page 105.

Evidently then they were additional factors tending towards the integration of the Region. Like the roads of the earlier period, also, they lessened the influence of the purely physiographic boundaries. The line which joined Saint John with Moncton and Shediac at 1860 passed through such subsidiary centres as Hampton, Norton and Sussex, and brought Moncton into closer contact with the Region.

Lines also connected Charlotte county and the Miramichi Valley with cities in the Region. Thus, on the basis of communication and opportunity to interact, New Brunswick's long history of isolation into two areas appeared to have been overcome. However, the social barriers which had been built up during the decades when the two areas were walled off by the physiographic boundaries continued to effect the extent of interaction.

As the French invasion moved southward along the east coast, Moncton finally became the racial frontier of the Province. This City had received a great impulse in growth as a result of the location of extensive railway snops within its boundaries.¹ With commercial development built on this base it began to encroach on the hinterland of Saint John, especially in the eastern areas of Kings and Queens counties. This process was, of course, not all on the one side. As Moncton grew it became an area of expansion for companies which had been located in Saint John, and which now established branches in the railway city.

The same process occurred between Saint John and the towns of St. George and St. Andrews, which headed up Charlotte county. These latter areas did not expand as did Moncton, but their reciprocal relationships with Saint John were the same as set out above.

1. Ibid. page 106.

Thus, while the area of Saint John's influence widened as a result of railway building, it was not all gain. Subsidiary centres derived some profit from the changes in communication, but the strategic position of Saint John and the advantage of its early growth enabled it to continue as the dominant centre.

THE PERIOD OF INTER-REGIONAL COMPETITION
1881-1901

1.

Economic Competition

Before the railways were built, and during the years of construction, the attitude of people in New Brunswick and Nova Scotia was one of optimism as to the results which would accrue to these Provinces when they were connected with the Canadas. The outstanding result was presumed to be the rapid development of Saint John and Halifax as sea port terminals for the whole of Canada. This point of view was strengthened by military policy, since one function of the roads was to give all of Canada access to the Atlantic over Canadian territory the year round.

Another gain on the part of the Maritimes was hoped to be found in new markets for the raw and manufactured surplus products of the two Provinces. The industrial development at Saint John and Halifax lead the Provinces to look for further expansion when trade with the rest of Canada was developed.

While the railways were actually under construction the Maritime Provinces enjoyed a degree of economic activity that obscured the deeper significance of the destruction of their isolation and the beginnings of competition with Quebec and Ontario. This prosperity resulted from the local markets for labour, raw materials and manufactured goods which the building of railways provided. Once construction was completed such markets disappeared and the meaning of interaction with Upper Canada became apparent.

What happened, in brief, is as follows. In the first place Saint John and Halifax did not become immediately the terminals for the international trade of Canada. Portland was still more direct and closer to the upper Canadian centres than were the two Maritime ports, and Canadian trade continued to move through the former terminal.¹

1. Appendix 1, Source "M", Note 1.

Further, the domestic revenue, especially in New Brunswick, was not sufficient to enable the relatively long lines to become paying propositions.¹ This new means of communication had joined up nearly all the small subsidiary centres that were gateways to the various agricultural or mining areas. Formerly these had supported a good deal of coastal shipping, but railway competition drove these enterprises out of existence.² This, of course, set up something in the nature of a vicious circle, as capital was destroyed and labour liberated to migrate.

With regard to the markets which the Maritimes had hoped to gain as a result of the railways, the result was just the opposite to what they had hoped. The Maritimes became markets for the industries of the two upper provinces, and so began the gradual decline of some phases of Maritime manufacturing.

The fundamental aspect of this economic situation, referring now to the St. John Valley only, was not primarily the competition from Ontario and Quebec, but the state of the Regional economy at this critical period. What has emerged from the preceding chapters dealing with the period of integration in the Region shows that the most important aspects of this economy were as follows:

1. The base of the Regional economic life was the export of comparative advantage commodities, ships and lumber, to well defined markets, the United Kingdom, the British West Indies and the United States.

2. All the economic enterprises of the Region were bound up in a close symbiotic relationship with these primary industries. Agriculture was dependent on lumbering for markets as well as actually participating in the

1. Ganong, W.F. op.cit. page 106.

2. Innis & Lower, "Select Documents in Canadian Economic History", 1933 Volume 2, page 670.

enterprise itself. Shipbuilding had evolved around it a host of secondary occupations which were definitely dependent on it for their continued existence. Even financial institutions, banks and insurance companies drew capital from, and were closely related to, these activities.

3. Finally, it has been pointed out, that as a result of the peculiar features of immigration a relatively large population of unstable Irish labourers were to be found in the Region. These formed a group which was not strongly attached to the land, but was likely to move readily in response to economic pressure.

Thus, in the last analysis, the economic structure of the Region, and perhaps of the Maritimes, was based on the production of comparative advantage commodities which were sold on a world market. These exports enabled the Region to purchase the goods, important in which were agricultural products, which were not developed locally.

During the latter part of the period of pioneering and through the decades of the integration period this symbiotic relationship brought prosperity to the area. About the time when railways were being built, and when Confederation was making a Dominion of the five Canadian Provinces, the resources and markets for these comparative advantage products began to disappear.

During the five years between 1886 and 1889 the index of shipbuilding tonnage fell to 29, where it had been 383 and 384 at 1861-65 and 1851-55 respectively.¹ Measured in another way, the value of shipbuilding products in the Region fell, 1871 to 1891, from \$727,564 to \$188,100.² This trend was a result of the change from wooden to iron vessels, which restored to the British Isles its early dominance in shipbuilding, and left the yards of the Region and the Maritimes to face gradual decline and limbo.

1. Appendix 2, Table 20.

2. Appendix 2, Table 10.

The trend in lumbering is not so clear due to the vague nature of the relevant statistics. The growth of pulp mill operations, and the employment given in saw mills by the processing of imported lumber products, are impossible to define quantitatively. Indications of the decline of this industry are, however, seen in the figures relating to the number of mills and to the number of employees.

It has been pointed out earlier that the maximum number of mills was reached at 1861,¹ and the number of hands employed at 1871.² Unfortunately these tables do not deal with comparable data throughout. At earlier decades the change to pulp wood products compensates for the decline in operations which had produced mill lumber.

The real blow to this industry, however, was concealed by reason of the participation of "farmers" in the lumbering industry.³ Somewhere in the years following the end of the period of integration the available timber disappeared from the banks of the rivers and streams, and with it went the cash crops of many farmers. With this change they had to either become agriculturalists in the real sense of the word or find some other occupation.

Their plight was made worse by the abandonment of saw mills and, consequently the dissolution of markets. Farms, which had been laid out with narrow fronts along the water⁴ had to be consolidated if economical farm layouts were to be effected,⁵ and this consolidation meant the appearance of a surplus rural population. In all, therefore, the decline of the early lumber industry had serious repercussions on the whole agricultural situation.

With regard to the financial and industrial enterprises of the Region

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1. Appendix 2, Table 8.
 2. Appendix 2, Table 7.
 3. Page 67, *supra*.
 4. Appendix 1, Source "D", Note 4.
 5. Appendix 1, Source "D", Note 1.

the weakening of the economy as lumbering and shipbuilding disappeared enabled the stronger and more specialized establishments of Ontario and Quebec to gradually displace them as competition appeared with the contact which railways created.¹ The banks developed by local interests, with capital derived from lumbering and shipbuilding, which were found in the period of integration, have been replaced by branches of national banks with head offices in Montreal and Toronto.

In the field of merchandising the Region has been invaded by outlets controlled from the cities of Quebec and Ontario. This has been accelerated by the growth of so-called "national" chain merchandising units. By utilizing the data contained in Dun & Bradstreets commercial directory it can be shown that at 1934 68% of all the commercial branch offices in the Region had their head offices located in Upper Canada.

This trend in the invasion of finance, merchandising and industry went on slowly after the end of the period of integration. It would be extremely difficult to describe the process statistically due to the nature of Census data which records the number and size of economic establishments. Nail and tack factories, rolling mills, boot and shoe industries and the like, which were listed in the early Censuses of Manufacturing, had largely disappeared after the turn of the Century. It is easier to see the beginning and end of the process than to describe the total phenomenon.

The fact that the incidence of these changes was obscured by the temporary prosperity due to capital circulated by railway construction has already been noted. The migratory Irish labourers were held in the Region by work which the railroads provided, so that a surplus population was kept in the Valley during these two decades of railway construction.

1. Innis & Lower, op.cit. page 227; also Appendix 1, Source "M", Note 1.

2.

Competition for Population

Coincident with the slow disintegration of the Regional domestic economy, about 1861, began an emigration of the population.¹ This movement out of the Region took place in the group below the age of 50, while above 50 there was some immigration probably caused by the return of former residents to their old homes.²

This movement was slight, but apparent, between 1861 and 1871 and gradually increased until a loss in gross population was recorded at the decade 1881-1891. From this latter date the Region has continued to lose part of its natural increase, as shown by each Census enumeration.

This trend in emigration illustrates another feature of the inter-regional competition which the railways brought to the Region. As its isolation was gradually destroyed the attractions and opportunities of other areas became evident. The Canadian and United States "West" were being opened up, and Horace Greeley's famous admonition became the slogan of the day. Thus the "pull" of immigration began to influence the surplus Regional population.

The "push" was, of course, the gradually constricting hierarchy of occupational opportunities that the decline of the old economy developed. The characteristic export of population from the Region, and the Maritimes, thus got under way as a result of the interaction of areas which had been self-contained, with areas which still had frontiers and the frontier philosophy.

It should be pointed out here that this constellation of social forces, and the movement of population which results, are not peculiar to the

1. Appendix 1, Source "I", Note 5.

2. This, and subsequent information on population from "The Maritime Provinces Since Confederation" D.B.S. 1926, page 8. et seq. Note: In the text the data supplied by the Bureau with reference to emigration from New Brunswick as a whole can safely be applied to the Region as there was very little emigration from the other areas, especially the eastern region.

Maritimes. In North America there have been several areas which have become regions of emigrations as other regions have attracted population from them. Most spectacular among these is, perhaps, New England. Once the hub of the United States in population, commerce, industry and finance it has, since the beginning of the Century, seen its population and prestige move westward. More lately the South has attracted many industries, such as textiles, which had been developed and cradled in the New England area.

In Canada this slow tide setting to the west, and to the north, has produced areas in old Quebec and Ontario which are now recognized as being centres of population exportation. Once these same areas may have attracted population from the Maritimes.

Thus, the history of the Region appears to be a movement towards an equilibrium with the other physiographic regions of Canada. As the economy of the St. John Valley, and subsidiary areas, gradually weakened, with the destruction of the "most favoured" base, it was brought into contact with the expanding economy of the upper Canadas. Competition just at this critical time hastened the decline of domestic enterprises, but there can be hardly any doubt that the result was foregone.

As autonomous units, the Maritimes would have faced serious difficulties. Their railroads, which were largely financed by capital from England and Canada have not, in many cases, been successful. New Brunswick is still a net importer of agricultural produce, which is largely paid for by revenue from pulp and paper, developed by Canadian and American capital, by transportation based on the produce of the Dominion, and by the tourist trade.

3.

Conclusion

While it is not the purpose of this study to follow the development of the St. John Valley Region during the modern period, it will be of interest, perhaps, to note one or two of the more important features of social and economic organization which developed upon the foundations laid down in the earlier stages of the life cycle.

In the Maritime Provinces as a whole, as well as in the St. John Valley, the larger social and economic phenomena have taken on the aspect of "Problems", which, in the minds of many people are inextricably bound up with the question of "Maritime Rights". Avoiding the issues which such reasoning raises, it is hoped that the description which has gone before will provide an historical background in the development of these problems in which the role of natural resources, topography and geographical location with respect to other areas in Canada will receive the attention they merit.

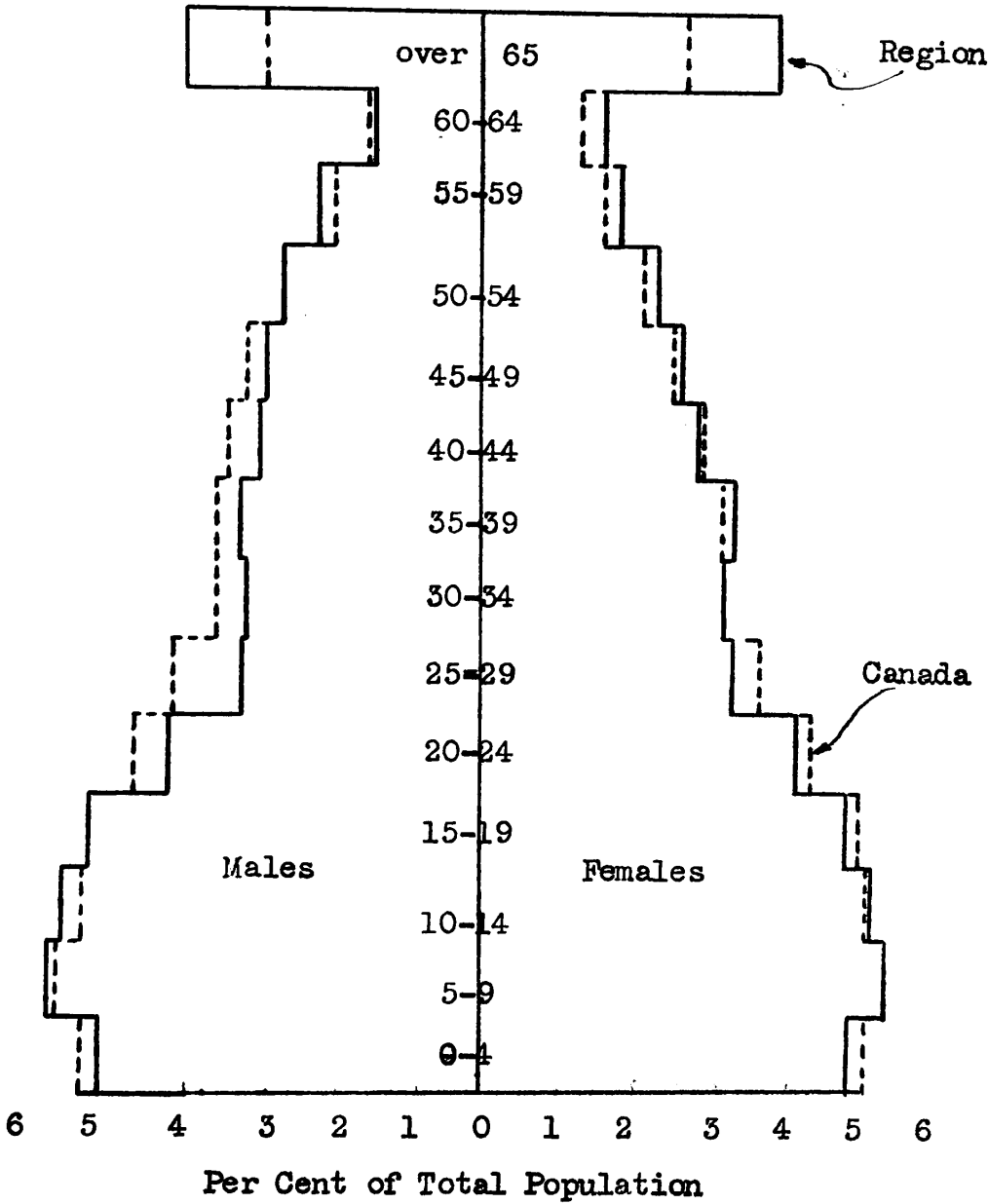
The features of the Maritime situation which have received the greatest publicity in the last decade or two have been the exportation of population and the relatively slow expansion of economic productivity compared with that of the rest of Canada.

Since 1881 the Maritimes have been exporting a net population of something more than 9,000 persons per annum on the average, even though the absolute population has been growing slowly.¹ At 1921 approximately 325,000 persons who were born in the Maritimes were living elsewhere in Canada. These emigrants have been largely from the age groups considered the most productive, i.e., between the ages of 15 and 65. The result of this drift of people out of the Maritimes on the population structure on the

1. This, and subsequent, data from "The Maritime Provinces Since Confederation", D. B. S. 1926.

Figure 9

Population Pyramids
Showing
THE AGE AND SEX DISTRIBUTION
in the
ST. JOHN VALLEY REGION AND CANADA
1931



Adapted from Census Data

St. John Region is demonstrated in Figure 9, which shows the conventional population pyramids for The Regional population and that of Canada based on data from the 1931 Census. It is apparent from this representation to what extent the Regional age groups from 15 to 45 have been depleted by emigration.

Along with this trend of depopulation there has been a relatively slow expansion of economic enterprise. While manufacturing capital, number of employees, and value of production have increased since 1901 they have not done so as rapidly as in other Canadian provinces. For example, while capital invested in manufacturing in New Brunswick increased by four times between 1901 and 1931,¹ it increased about 9 times for all Canada. Similarly the value of manufactured production in New Brunswick increased by three times as against six times for Canada during the same period.

Each of these phenomena has been advanced as the cause of the other in various descriptions of the "Maritime Problem". That is, some writers have seen the retarded economic status as being caused by the emigration of the productive and enterprising young; others have taken the stand that an economy that provides a minimum of opportunity and employment is responsible for the drift of population out of the Maritimes.

That there is some connection between these two phenomena can hardly be doubted, but it is not necessarily true that either is the causal factor of the other. Rather it seems likely that each is the result of an historical process which was limited and conditioned by natural resources, topography, transportation routes and similar factors, as well as the relationship of all these local features to other regions in Canada.

1. Ibid. page 76. Table 3.

In other words, to say that emigration and retarded economic progress in the Maritimes are explanations of a situation is only a half truth, these phenomena are symptomatic of a situation which is understandable only as it is seen as the result of a genetic natural process.

In each stage of the life cycle of the St. John Valley the physical features and natural resources have played a significant role. While the periods of railroad building and of inter-regional competition have been dealt with in a manner which merely indicates some of the major phenomena, something of the results which followed the destruction of the Regional isolation, and the decline of its natural resources, have been indicated. It was not the purpose of the study to describe these stages in detail, but some note of them was necessary to round out the description of the earlier periods, and to delineate the organic nature of the relation of all the stages.

It is a fact that the economic background has dominated the description. Such a bias results from the preponderance of economic, in contrast to social, data which has been preserved by history, rather than the point of view of the writer.

Appendix 1.

DOCUMENTARY SOURCES.

SOURCE "A"

"Canada", 1934

Publication of the
Dominion Bureau of Statistics

Note 1:

"In order to make (Canadian) union effective it was necessary to establish at once direct and easy communication between all parts of the new Dominion The barrier presented by the Laurentian Pro-taxis was overcome by building the Canadian Pacific Railway from Montreal to Winnipeg.

The obstacle to free passage between the Maritimes and Western Canada has been removed by the construction of the Intercolonial Railway from Halifax to Quebec." (page 32)

SOURCE "B"

"Canada and its Provinces"

Note 1:

"Settlement in Canada in the latter days of the Eighteenth and the beginning of the Nineteenth Centuries followed the wayerways....."

In New Brunswick the conditions so late as 1849 enable one to understand the earlier conditions. In that year Lt. Governor Head pointed out in a dispatch to Earl Gray that the Province was divided into long stretches of settlement with tracts of wilderness between, which were traversed at a few points by roads leading from one settlement to another. North from Saint John to Madawaska the line of settlement followed the River St. John for 200 miles." (vol. 10, page 359)

Note 2:

"In New Brunswick, the European and North American extended from Saint John to Shediac, a distance of 108 miles, while the St. Andrews and Quebec had been constructed for St. Andrews to Richmond, a distance of 88 miles." (vol. 10, page 391)

Note 3:

"The progress of road construction was so slow at the first that twenty years after the arrival of the loyalists the government surveyor reported that ten miles of road fit for any description of wheel carriage was not to be found in the province, except for that on the east bank of the St. John in Sunbury, where nature had chiefly performed the task.

For at least twenty five years, after the loyalists, the rivers continued to be the main routes of travel, both in summer and winter. Even the members of the legislature drove in sleighs upon the ice to attend the sessions at Fredericton. The first house of the settlers usually stood on the bank of the river, and the roads in consequence in nearly all cases, ran past the back doors of the farmhouses The configuration of the counties has been very largely determined by the rivers. They were the earliest routes of travel." (vol. 13, page 169)

Note 4:

"In many instances you may not only discover the comforts of life, but luxuries procured by their overplus produces, or by their winter exertions in masting, getting timber wood, etc. for which they receive liberal wages." (1800 circa) (vol. 13, page 182)

Note 5:

"The population of Saint John, including Portland, in 1824 was 11,531."
(vol. 13, page 196)

Note 6:

"The agitation for responsible government did not begin in good earnest until 1840. From that time it was continued until 1854, when the reins of power were wrested from the grasp of the Family Compact, which had retained control for seventy years. Under the new system the members of the executive government no longer held office during pleasure or good behaviour, but only so long as they retained the confidence of a majority of the representatives of the people in the house of assembly, the criterion of their fitness for office being their performances as advisers of the Lieutenant Governor and originators of sound measures for the betterment of the country. Many of the men who were destined to play an important part in the promotion of Confederation were trained for leadership in the struggle for responsible government." (vol. 14, page 403)

Note 7:

"At the time when the Atlantic provinces began to discuss Maritime union the people of Canada and the people of New Brunswick, owing to the lack of the means of intercourse, were almost unknown to each other. In fact, the people of New Brunswick knew much more of their United States neighbours than they did of their fellow-subjects in Canada." (vol. 14, page 411)

Note 8:

"Governor Carleton continued to visit the different settlements from time to time. His habits were active. A year or two later he walked on snow shoes to Quebec to see his brother, Lord Dorchester, who was ill. He spoke of it as a pleasant excursion, although he was obliged to tramp over a vast uninhabited region and to camp eight nights in the woods."
(vol. 13, page 156)

Note 9:

"Maugerville, Sackville, and Cumberland were merely New England communities planted in Nova Scotia, with all the peculiarities, prejudices and opinions of the communities from which they had emigrated."
(vol. 13, page 129)

SOURCE "B"

Note 10:

"Two other considerable fleets arrived during the year: one on June 28 with about two thousand passengers, and one on September 27 with three thousand. Other ships arrived at intervals, bringing the number of those who came to the St. John River up to about ten thousand persons."
(vol. 13, page 145)

Note 11:

"Sir Guy Carleton suggested that they should be settled along the frontier, like the cantonments of any army, to serve as a bulwark against any aggression, each corps to have its own particular grant..... An extract from the instructions is here quoted:

"In order to strengthen the proposed settlements, and that they may be in a state of security and defence, it is our will and pleasure that the allotments to non-commissioned officers and privates be by corps, and as contiguous as may be to each other, and that the allotments to the several commissioned officers shall be interspersed therein, that the same may be united, and, in case of attack, be defended by those who have been accustomed to bear arms and serve together."

(vol. 13, page 148)

Note 12:

"The scheme of settling the Valley of the upper St. John with disbanded troops was only moderately successful. The tracts assigned the de Lancey battalions were about one hundred and fifty miles from the sea, and the lands above were deemed too remote for settlement. One half of the regiments were unwilling to settle in a situation so difficult to access, or to risk the dangers to be apprehended from the Indians, who regarded the newcomers with a jealous eye."
(vol. 13, page 151)

Note 13:

"The difficulties connected with the settlement of the loyalists were not easily dealt with by a government so far away as Halifax, particularly at a time when the means of communication were very inadequate. In consequence a movement was set on foot, looking to the formation of a new province."
(vol. 13, page 152)

SOURCE "B"

Note 14:

"After the arrival of Governor Carleton the settlement of the country proceeded rapidly, and most of those who had arrived in the province were speedily placed upon the lands. In consequence the population of Saint John, which during the first winter must have been at least five or six thousand, was considerably reduced. The city, however, still contained a large proportion of the energy and intelligence of the province."
(vol. 13, page 162)

Note 15:

"One of the first things that claimed the attention of the legislature was the necessity of improving the means of communication between the various sections of the province. Commissioners were appointed by lay out roads and were empowered to solicit subscriptions to aid in road making..... But the country was so largely an unbroken wilderness and the people so poor that the work of road making proceeded very slowly. It was well nigh forty years before even the main lines of communication were in a condition to be of much service for summer travel." (vol. 13, page 168)

Note 16:

"A good many (settlers) also went back to the United States, discouraged at their prospects, or intent upon securing the advantages of education for their children. Certainly, the lack of schools was a serious disadvantage to the rising generation, the greater part of which was growing up in ignorance. It was clear that the children of the loyalists were destined to be inferior to their parents in knowledge, if not in ability and force of character.

The industrial development of the first twenty years in the history of New Brunswick gave much promise of greater things in the future. Shipbuilding had been carried on in a small way before the coming of the loyalists, but rapidly increased after their arrival. At St. Andrews and other places in the county of Charlotte at Saint John and on the Miramichi, ships were built in large numbers. During the two or three years that preceded Carleton's return to England ninety-three square-rigged vessels and seventy-one sloops were built, most of them for the West India trade."
(vol. 13, page 182)

SOURCE "C"

"Canada Year Book", 1867

Note 1:

"The surface of New Brunswick was at one time an unbroken lumber field, and the valley of the St. John contained what was thought to be an inexhaustible supply of the finest white pine lumber. It is, however, now generally conceded that almost all of the fine white pine within reach of the tributaries of that River has been cut. The lumberers have, therefore, turned their attention more to the coarser pine still to be had in large quantities, out of which sugar box shooks are made, and to the black spruce."
(page 43)

"The First History of New Brunswick",
Fisher, Peter, 1825

Note 1:

"Saint John carries on a brisk trade with Europe, the West Indies and the United States, in lumber of different descriptions, fish, grindstones, gypsum, etc., but the staple article is squared timber, one hundred and fourteen thousand, one hundred and sixteen tons of which were shipped from this port in 1824. Shipbuilding has also been lately revived to a considerable extent. Sixty vessels were registered at this port in 1824, whose tonnage amounted to sixteen thousand, four hundred and eighty-nine tons, besides three ships and five brigs not in the above estimate. Part of these were built in Saint John and the remainder up the rivers and along the coasts for merchants in the city." (page 42)

Note 2:

"State of the Madras Schools in New Brunswick, in July 1824.

<u>Area</u>	<u>Average Attendance</u>	<u>Total Entered</u>
Saint John	197	1,222
Carleton	96	143
Fredericton	50	79
Douglas	22	45
Queensborough		45
Kingston	24	81
Springfield	25	117
Gagetown	38	114
Sussex Vale	38	114
Hampton	26	75
Norton		60
Maugerville	28	91
Woodstock	71	211
Wakefield	42	176
Northampton		35
Military Settlement		
No. 1	38	140
No. 2	36	131
No. 3	24	159
No. 4	24	116
Scottish Settlement	20	36
	799	

Note 3:

"From the foregoing statement it plainly appears that chief of the export trade of this Province consists of lumber, which is its natural stock or capital and as there are many articles taken in exchange from the mother country, which are indispensably necessary to the inhabitants of this Province, it points out the necessity of paying strict attention to its preservation. In this country there is not article, or articles, that can in any degree furnish exports equal to the pine, which is manufactured in the simplest manner, and got to market with but little trouble. So simple is the process, that most settlers who have the use of the axe can manufacture it, the woods furnishing a sort of simple manufactory for inhabitants, from which, after attending to their farms, in the summer, they can draw returns during the winter for those supplies which are necessary for the comfort of their families." (page 85)

Note 4:

"The method of laying out lots in this Province, of a narrow front and extending a great distance back, is very inconvenient to the settler." (page 98)

Note 5:

Appendix. Speech of the Lt. Governor.

"Vast sums are sent from this Province, in species, for the purchase of agricultural produce. This enormous burden, operating in fact, as a tax raised by foreign industry on our food, contributes to raise high above the rate in surrounding countries, the wages of labour here, and to lay the Province under corresponding difficulties and disability in every branch of its industry.

The main branch of our manufacturing industry, shipbuilding, has increased prodigiously, and is now carried on to an extent beyond that of any former period." (page 102)

Note 6:

"The Public Service has been exposed to very serious inconvenience by irregularities incident to the present line of communication between the Seat of Government and the City of Saint John. To remedy this, whatever it may be necessary to do in other times and seasons, I earnestly recommend the expediency of completing such a communication with Saint John for winter travelling and Post Road, as may not be subject to those serious and dangerous interruptions to which the present line must always be exposed, during the greater portion of the year." (page 103)

SOURCE "E"

"Guide to New Brunswick"

Lugrin, C.H., 1886

Note 1:

"Among the countries, containing a sufficient area of unoccupied land, to afford a home for a large number of new settlers, few possess as many, and none more, features to recommend them as does New Brunswick. Whether the Province is considered in regard to the quality of the soil, the healthfulness of its climate, the extent and permanent character of its domestic market for farm produce, its convenient position as respects a foreign market for its products, its adaptability for agriculture, cattle and sheepraising, or for manufactures in whatever respect it may be regarded New Brunswick will be found well worthy of consideration of those who contemplate settling in America." (page 3)

Note 2:

"Over 130,000 gallons of milk are shipped from Sussex to Saint John daily." (page 65)

"A Monograph on the Origins of Settlement
in New Brunswick"

Ganong, W.F., 1904.

Note 1:

"All navigation being by water, the settlements of the period were almost exclusively on navigable waters, the earlier on waters navigable by vessels or boats, and the later on waters navigable at least for canoes." (page 71)

Note 2:

"During the War of 1812 all road building effort had been, for military reasons, centred upon the road to Canada, which ran by the St. John and Madawaska, to Quebec, but it was not completed for many years. After the close of the War work was at once resumed on the other roads." (page 89)

Note 3:

"The importance of these roads (1812-1850) from our point of view consisted in this, that many of the early settlements were located upon them. This had the double advantage of providing the settlers with roads read built, and of providing the roads with settlers who would offer accomodation for travellers, keep them broken open during the snows of winter, and steadily work to improve them during the summer.

Communication was also improved in this period in another way, namely, by the establishment of steamboat lines, not only to the United States and neighbouring provinces, but to St. Andrews and along the entire length of the St. John from its mouth to Edmundston. Indirectly these lines had an effect on the distribution of settlement, since they made more distant parts of the St. John accessible, and hence allowed some of the new settlements to be formed some distance up its course." (page 90)

Note 4:

"Communication having been much improved, especially by the building of roads (after 1812), it now became possible to form settlements away from the navigable waterways, and second, all of the best positions, and most of the best lands, having been preempted by the earlier settlers, it was necessary for the settlements of this period to be formed largely in less

Note 4 (Continued)

advantageous situations.

Considered broadly, the new settlements of this period occupied four kinds of situations,

1. They were formed on certain parts of the coast presenting fair lands, not previously taken up.
2. The occupied lands on the principal rivers above the older settlements.
3. They occupied positions along the courses of the Great Roads, which gave access to new land.
4. They occupied good tracts of land, commonly, ridges on the bank lands as near to the old settlements as could be found."
(page 91)

Note 5:

"As a rule the immigrants were extremely poor, commonly landing in the Province with absolutely no possessions, even their passage being paid by Government. It was necessary, therefore, not only to provide assistance until they could become self-supporting, but to grant them lands on the easiest possible terms."
(page 76)

Note 6:

"Moreover, in 1786, the new Government divided the Province for convenience of local administration into eight counties, each with a central shire-town to contain the local administrative offices (court houses, jails, record and probate offices). The towns (properly parishes) thus chosen were St. Andrews, for Charlotte; Saint John for St. John; Kingston (changed in 1871 to Hampton), for Kings; Gaagetown, for Queens; Burton (temporarily Mauderville), for Sunbury; Fredericton for York; Westmorland (changed in 1801 to Dorchester), for Westmorland; Newcastle, for Northumberland. In each case the most prominent or populous place or village in those parishes was selected as the site of the county buildings, which gave them an additional stimulus inducing a growth greater than would have been the case from natural environmental and other causes; so that in most cases those places have thus been aided to grow into the considerable villages or towns they have since become."
(page 69)

SOURCE "F"

Note 7:

"....it is commonly affirmed in the Province that New Brunswick has more miles of railroad, in proportion to its population, than any other country in the world.

The first railroad planned in the Province was one from St. Andrews to Quebec, which, first discussed in 1835, was actually commenced in 1851."
(page 103)

SOURCE "G"

"New Brunswick"
Gesner, A. 1847

Note 1:

"The manufacturing industry in Saint John has advanced with the growth of the city. It has now three iron foundries, in which exalted steam engines and other machinery are made. There are also a number of flour mills turned by steam and water, for the manufacture of foreign grain, but, from the abundant presence of timber, the sawing of logs into deals, scantlings, shingles and laths, has called forth the greatest amount of capital." (page 124)

Note 2:

"Besides being open to foreign trade, the situation of Saint John is very favourable for colonial traffic. The timber and other resources of the interior of the Province - and, since the settlement of the Boundary dispute, a part of the State of Maine - are transported down the river to the city, which commands the business of the towns and settlements above. It has also taken the traffic of the Bay of Fundy, and through that channel continues to draw away the production of Nova Scotia from Halifax." (page 126)

Note 3:

"There are several shipbuilding establishments on the border of the bay (in Kings County) whence timber, deals and agriculture produce are shipped in large boats to Saint John." (page 145)

Note 4:

"Sussex 2,500. contains several churches, a salt works, post office." (page 147)

Note 5:

"Gagetown.....contains an Episcopal Church, Grammar School, Court House and gaol. From the town roads diverge to Fredericton, Oranmcto, Nerepis and other places and it is a shipping point for the produce of the district.

Woodstock, 2,000 people. Court House, gaol, 4 Churches, 1 Bank, Grammer School." (page 152)

Note 6:

"Saint John still continues to command the trade of the whole river. The lumberman, when once fairly embarked on his raft or timber, continues to descend the stream until he reaches its mouth, and the surplus agricultural produce of the rural districts will be carried to the brisk market of a seaport town, whence exportations are made with every facility.

From such and other like causes, Saint John is rapidly advancing in wealth and population, while Fredericton remains stationary, and in some degree dependent upon the money that flows from the military chest. Remove from the capital its warlike establishments, the Legislature and the public functionaries of high salaries, and it would soon be a plain country village, whose inhabitants would have to look to agriculture and manufacturing pursuits for their support." (page 161)

Note 7:

"The merchants of Fredericton obtain their chief supplies of goods from Saint John. They are brought up in steamers plying daily upon the river, except during the winter when the communication is maintained by sleds drawn by horses over the ice. The large supplies of produce required by the lumbermen during their encampment in the woods are also chiefly purchased at the same place; and the preponderance in favour of lumbering pursuits is so great, that the labourious agricultural population under the present system of husbandry, are unable to supply their own wants and those of the timber gaugers employed in the wilderness." (page 162)

Note 8:

"The facilities for procuring timber, the abundance of fish on the coasts and in the rivers, and plenty of game, directed the attention of the early inhabitants away from the tillage of the soil, and agriculture has been considered an inferior occupation.

It has been supposed by many, that by drawing the population away from husbandry, lumbering pursuits have been disadvantageous to the country. To certain limits, such an opinion may be in some degree correct, but it should be considered, that the lumbermen have discovered and explored new districts, they have opened the winter roads, cleared rivers of obstructions, and been the pioneers of many flourishing settlements. From the timber trade a number of small towns have sprung up, commerce has received its chief support, and the Province has received a large revenue." (Page 167)

Note 9:

"Many settlers and squatters, therefore, prefer clearing a new place every year, to the cultivation of tracts from which the timber has been removed. These men will remove their shanties into the deep recesses of the forest, where, to use their own phrase, they "knock up a shanty", and commence chopping."
(page 246)

Note 10:

"Excepting the mills and machinery employed in sawing wood, the manufacturers may be called domestic, as none of their productions are exported. The iron and coal employed in the foundries are imported from Great Britain, notwithstanding both of these articles are abundant in the Province. The operations of the foundries are confined to the manufacture of such articles as are required by the country. In the larger towns there are breweries, tanneries, and small establishments for making soap and candles, but the tables of trade show that the exports being the productions of the Province are objects in their natural state, or such as have only undergone the preparatory process of manufacture.
(page 304)

Note 11:

"The first English settlement made on the Saint John was at Mauderville. In 1766 a number of families in Massachusetts obtained from the Government a grant of a township on the St. John, and immediately removed to the above place, now known as the county of Sunbury. At different times during the Revolutionary War, they were reinforced by families from New England. The first commission of the peace for this new settlement is dated 11th August 1766, and the Courts of Common Pleas were held in Sunbury until 1783, when Fredericton became the seat of the government.

The first inhabitants erected a fort at Oromocto. The sufferings and hardships endured by these people, from the time of their landing up to the close of the American Revolutionary War can scarcely be conceived....."
(page 50)

Note 12:

"The rapid increase in population may be ascribed in some degree to the employment created by the timber trade. The average number of emigrants that arrive in the Province annually is about 6,000; of these, not less than 2,500 depart annually for the United States, and other places, leaving 3,500 as the actual number of British emigrants who remain in the Province."
(page 318)

Note 13:

"Of the great number of emigrants who land in New Brunswick from the returned timber ships, only a few remain and establish themselves in the Province..... The current of Emigration flows into the different parts of the American continent in proportion to the amount of employment offered to the labouring class. A great number of the immigrants into Canada during several years have found employment on public works. From the great number of public works carried on in the United States by the inhabitants, and by the expenditure of much British capital, employment has been given to thousands of Irish immigrants." (page 372)

Note 14:

"Too often, poor emigrants linger about the sea port in the hope of obtaining employment, until all their means are exhausted." (page 372)

Note 15:

"The chief part of the immigrants that land in the country soon depart for the United States, and the few that remain are of the most indigent class." (page 373)

Note 16:

"It has been justly remarked by Mr. M'Gregor, that a suspicion prevails among the working classes all over America, that the taking of a census implies the levying of a poll-tax, and therefore the real numbers of many families are withheld. Such an opinion is still common in New Brunswick." (page 315)

SOURCE "H"

"Rambles among the Bluenoses"
Spendon, A.L., 1863

Note 1:

"The people of Saint John apparently possess, on the whole, more of the American characteristics than that of the British." (page 63)

Note 2:

"During summer 6 small steamers ply daily between Saint John and Fredericton - and the number of persons who pass up and down the river is estimated at 60,000." (page 67)

SOURCE "I"

"Report on the Agricultural Capabilities of
New Brunswick."
Johnston, J.W., 1850

Note 1:

"Thus my friend and fellow traveller, Mr. Brown, in reporting to me his observations made at the end of October upon the practical farming of the River border between Gagetown and the Oromocto, makes the following most just remark: "Through the whole of these Settlements, if we except Gagetown and its immediate vicinity, there has been comparatively little done in the way of farming in view of a crop for another year. Indeed there are no proper farming tools. Their ploughing is wretched, and so also are the ploughs. It is common to see the ploughman carrying his plough in his hand like a chain, or on his shoulder like a handspike, or holding by a pin stuck through a single upright handle. The fact appears to be that most of these farmers have a portion of island or intervale property, from which they annually obtain, with little trouble, a quantity of hay. This gives them a decided advantage over the farmers in the interior, and enables them to plod on without attempting to adopt any of the improvements now going forward in the northern part of the Province."

(page 4)

Note 2:

"Great Roads"	Miles
Saint John to Fredericton	65
Saint John to St. Andrews	65
Saint John to Quaco	31
Gondola Point to Fredericton	70
Saint John to Moncton	95
Fredericton to Newcastle	106
Fredericton to Woodstock	62
Woodstock to Houlton	12
Woodstock to Grand Falls	71
Grand Falls to Madawasks	40
Nerepis to Gagetown	24
Salisbury to Harvey	42
Hampton to Bellecote	4
Other	8
	<hr/> 695 <hr/>

Total in New Brunswick 1,269 (1850)

(page 19)

Note 3:

"The cutting of timber in the forests of New Brunswick, and the subsequent hauling and floating of the logs and rafts to the mills and harbours, has hitherto been the main resource of the labourers of the Province. The sawing and preparing of this timber has been the chief manufacture of the country; and the lumber thus obtained or produced, in its various forms, has been the staple article of export, and of traffic with foreign markets.

Such a trade as this, it is obvious, can only be carried on permanently or in parts of the world which are unfit for agricultural purposes. In all other countries it can continue in a state of vigour only during the transition period, longer or shorter according to circumstances, which is necessary to convert the wide forests into settled farms, and to replace the wild animals and the native timber trees by civilized tillers of the soil, and nutritious crops of corn.

The decline of the timber trade of New Brunswick, therefore, supposing it not to have been overdone, and the natural forest resources of the Province not to have been injudiciously squandered, is a natural and necessary consequence to the progress of agricultural settlement." (page 50)

Note 4:

"It is safe, I think, to conclude, that the actually slow progress and backward condition of the agriculture of the Province, and the hopeless condition of many of its cultivators, has arisen from the too eager and universal prosecution of this trade. It is not surprising therefore that the friends of agriculture in the Colony, who have considered it fitted for agricultural operations, and have regarded them as a surer and more permanent source of wealth and general comfort than the occupation of the lumberer, should have looked with regret upon the continuance of the trade, and should have expected ultimate good to the Province from the late depressions and reverses to which it has been subjected." (page 51)

Note 5:

"Another circumstance which has hitherto exercised an unfavourable influence upon the agricultural progress of the Province, and especially upon the opinion entertained as to its agricultural capabilities, is the tide of emigration from New Brunswick, which constantly sets more or less strongly to the United States. During the last two or three years this emigration has been more frequent and general than for some years previously." (page 58)

SOURCE "J"

"Seventy Years of New Brunswick Life"
Baird, Wm.T., 1890.

Note 1:

"Before the introduction of steam as a propelling power on the River, a boat ran between Saint John and Fredericton, driven by horse power. The first steamer was the General Smith in 1816. Following her was the St. George in 1825." (page 48)

Note 2:

"(In 1823 - Carleton Co.) There being no highway road, the appearance of a stranger was to the settlers an event, and the news as greedily seized upon as we now do our morning paper; with this difference, that related might have been several months old; and that read the event of yesterday." (page 14)

Note 3:

"The River St. John was navigated by tow boats, drawn by horses. All the lumber-square timber and logs cut upon its banks was floated to Saint John." (page 17)

SOURCE "K"

"An Account of the Province of New Brunswick"
Thomas Baillie, London 1832

Note,1:

"The settlements being confined to the margins along the rivers and other navigable streams, is occasioned, not by the dearth of good lands in the interior, but by the want of good roads, and by the facility of communication and carriage by water." (page 12)

Note 2:

"I have yet to describe another source of profit which our farmers who have settled on the banks of the rivers have heretofore enjoyed. During the winter months, while the earth is locked up within an impenetrable barrier of snow, a man can cut a few loads of pine or birch timber, either on his own property or on the waste lands of the crown." (page 14)

Note 3:

"Mills for sawing timber are our principal and largest branch of machinery. In the neighbourhood of a large sawmill a settlement of several families is always seen, for employment is given to a blacksmith and a carpenter if not a millwright. The number of millers and labourers with their wives and children encourage a shoemaker, a tailor and other small traders to settle near them.... A mill working two saw mills will employ four first rate millers, four second rate and two ordinary, thirty four common labourers and occasional work for a millwright, carpenter and blacksmith." (page 31)

Note 4:

"Saint John furnishes Fredericton with a considerable quantity of the lime she consumes, and the whole of the interior of the River St. John with English, West Indies and American goods. Pine timber is the great article of export." (page 60)

Note 5:

"The different sorts of grain, grasses and roots are here raised (in Kings and Queens) and the superfluity, which is not much, is sent to Saint

SOURCE "K"

Note 5 (continued)

John. This agricultural district contributes greatly to the supply of Saint John with butter and cheese." (page 68)

Note 6:

"The fruits of the soil raised in Sunbury and York are all that man requires, not only for subsistence and comfort, but even for luxuries. The parishes fronting on the St. John River supply a large part of the lumber trade with hay, oats and Indian corn. Fruits and culinary plants are sent to Fredericton and Saint John markets..... Timber, mill lumber, tanner's bark, staves lathwood, shingles and fuel wood employ many industrious persons for the support of Saint John." (page 76)

SOURCE "L"

"The Economic Welfare of the Maritime Provinces"
Saunders, S.A.

Note 1:

"The early lumber industry of the maritime provinces was built on their forests of pine and was inextricably bound up with wooden ship building. For the most part the white pine was hewn into square timbers and shipped principally to England; Nova Scotia had a considerable trade with the West Indies, where lumber followed in the wake of the codfish. As the larger and more accessible trees were exhausted, smaller dimensions were utilized, and the square timber gradually gave place to sawn lumber of smaller size."
(page 18)

Note 2:

"The growing demand of the American market, with the gradual exhaustion of their own resources, led to an increasing dependence upon the Maritimes. New Brunswick was most favourably situated to handle this trade, for with her large rivers she was able to concentrate her production in mills of considerable capacity, which were best suited to cater to a market supplied by ever increasing quantities of the more highly finished commodity. As the industry moved farther north, and especially on the St. John River, farther inland, following the retreating timber supplies, greater dependence upon railway transportation was inevitable, and this in turn hastened the switch from the crudely drawn to a more highly finished product."
(page 18)

"Canadian Probabilities"
C.W. Wetmore,
Saint John, 1889

Note 1:

"Under Confederation New Brunswick has been continually between the upper and nether mill stone.

- a. At the outset she was deprived of her rights as to having the natural principal Atlantic port of the Dominion.
- b. Many of the shoe and other factories were closed by the competition of the larger establishments of Quebec and Ontario.
- c. A large portion of her import trade was diverted to the more extensive houses of the provinces just mentioned.

Appendix 2.

STATISTICAL SOURCES.

TABLE 1.

Number of Settlements During the Primary and
Secondary Periods of Expansion.(1)

Period	St.John	Kings	Queens	Sunbury	York	Carleton	Victoria	Total
1783-1819	7	23	13	5	10	4	2	64
1820-1860	5	20	14	5	37	22	10	113
<hr/>								
T o t a l	12	43	27	10	47	26	12	177

Percentage of Total Settlement at Each Period

1783-1819	58.3	53.5	48.1	50.0	21.3	15.3	16.6	36.2
1820-1850	41.7	46.5	51.9	50.0	78.7	84.7	83.4	63.8
<hr/>								
T o t a l	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Adapted from Ganong, W.F. "A Monograph
on the Origins of Settlement in the
Province of New Brunswick." Appendix

TABLE 2.

Origins of Settlements during the Primary and
Secondary Periods of Expansion.(2)

<u>Period</u>	<u>Native Origin</u>	<u>Immigrant Origin</u>	<u>T o t a l</u>
1783-1819	62	9	71
1820-1860	47	61	108
T o t a l	109	70	179

Percentage of Settlements by Origin during the
Primary and Secondary Periods

1783-1819	87.3	12.7	100.0
1820-1860	43.5	56.5	100.0
T o t a l	60.9	39.1	100.0

- (1) Adapted from Ganong, W.F. "A Monograph
on the Origins of Settlement in the
Province of New Brunswick". Appendix

TABLE 3.

Regional Population, by Counties,
for Decades 1831-1931

(Canada Census Data)

Counties	1831 ¹	1841 ¹	1851	1861	1871	1881	1891	1901	1911	1921	1931
St. John	18,339	33,458	38,475	48,922	52,120	52,966	49,574	51,759	53,572	60,486	61,613
Kings	10,945	14,885	18,842	23,283	24,593	25,617	23,087	21,655	20,594	20,399	19,807
Queens	6,465	8,450	10,634	13,359	13,847	14,017	12,152	11,177	10,897	11,679	11,219
Sunbury	3,654	4,354	5,301	6,057	6,824	6,651	6,762	5,729	6,219	6,162	6,999
York	17,271	14,325	17,628	23,393	27,140	30,397	30,979	31,620	31,561	32,259	32,454
Carleton		13,666	11,108	16,373	19,938	23,365	22,529	21,621	21,446	21,100	20,796
Victoria			5,408 ²	7,701 ²	4,407	7,010	7,705	8,825	11,544	12,800	14,907
Totals	56,674	89,108	107,396	139,088	148,869	160,023	151,788	152,386	155,833	164,885	167,795
Absolute Increase		32,434	18,288	31,692	9,781	11,154	- 8,235	598	2,807	9,692	2,910
% Increase		57.2	20.5	29.5	7.0	7.5	- 5.2	0.5	1.8	6.2	1.7

(1) Estimates by natural, or arithmetical interpolation from intercensal periods.

(2) Includes Madawaska.

TABLE 4.

Regional Population by Counties, Intercensal
Periods 1824, 1834 and 1840

(Canada Census Data)

	1 8 2 4	1 8 3 4	1 8 4 0
St. John	12,907	20,668	32,957
Kings	8,030	12,195	14,464
Queens	4,741	7,204	8,232
Sunbury	3,227	3,838	4,260
York	10,972	10,478	13,995
Carleton		9,493	13,381
T o t a l	39,877	63,876	87,289

TABLE 5.

Agricultural Imports into New Brunswick by
Commodities and Quantities

<u>Commodity</u>	<u>Unit</u>	<u>1 8 2 4</u>	<u>1 8 4 5</u>	<u>1 8 6 6</u>
<u>Grains</u>				
Indian Corn	bus.	37,917	50,322	73,670
Wheat	bus.	5,418	263,752	
Rye	bus.		2,226	
Oats	bus.	9,863	78,664	77,618
Barley	bus.	1,452		35,166
<u>Grain Products</u>				
Wheat Flour	bbls.	1,088	63,171	235,337
Rye Flour	bbls.	32,512	12,756	5,097
Corn Meal	bbls.	3,448	40,632	35,539
Bread	cwt.		5,144	2,872
<u>Meats</u>				
Salt Pork	bbls.	4,719	11,885	9,741
Beef	bbls.		2,661	
Fresh Meat	cwt.		488	
<u>Butter and Cheese</u>	lbs.		137,100	151,439
<u>Fruits and Vegetables</u>	bus.	3,016		93,616

SOURCE :

- 1824 : Fisher, Peter - "First History of New Brunswick", chapter on
"Commerce".
1845 : Gesner, A. - "New Brunswick", page 307
1866 : Canada Year Book, 1868, page 151.

TABLE 6.

Regional Urban Population.

Saint John and Fredericton 1831 - 1931, other urban areas at various decades.

(Canada Census Data)

	1831	1841	1851	1861	1871	1881	1891	1901	1911	1921	1931
Saint John ²	16,071 ¹	25,803 ¹	33,902	42,000	41,325	41,353	39,179	40,711	42,511	47,166	47,514
Fredericton	2,634	4,043	4,458	5,652	6,006	6,218	6,502	7,117	7,208	8,114	8,830
T o t a l s	18,705	29,846	38,360	47,652	47,331	47,571	45,681	47,828	49,719	55,280	56,344
% Increase		59.5	28.5	24.2	- 0.6	+ 0.5	- 4.0	+ 4.7	+ 3.9	+ 11.2	1.9
Woodstock					2,282	2,487	3,288	3,644	3,856	3,380	3,259
Grand Falls							530	644	1,280	1,327	1,556
Marysville							1,339	1,892	1,837	1,614	1,512
Devon										1,924	1,977
Hartland										879	907
Sussex									2,460	3,070	2,767
Total Urban	18,705	29,846	38,360	47,652	49,613	50,058	50,838	54,008	59,152	67,474	68,422
% of total population	33.2	33.5	35.6	34.2	33.3	31.3	33.5	35.4	37.9	40.9	40.8

1. Estimates by arithmetical interpolation.

2. Includes Portland.

TABLE 7.

Numbers of Persons Employed in Saw Mills, and average
number per Establishment
1851 - 1911

(Canada Census Data)

	<u>1 8 5 1</u>		<u>1 8 7 1</u>		<u>1 8 8 1</u>		<u>1 8 9 1</u>		<u>1 9 0 1</u>		<u>1 9 1 1</u>	
	No. per		No. per		No. per		No. per		No. per		No. per	
	Employees	Establ.	Employees	Establ.	Employees	Establ.	Employees	Establ.	Employees	Establ.	Employees	Establ.
St. John	803	15.7	2,261	39.7	2,141	41.1	1,912	57.9	1,431	55.0	1,210	45.8
Kings	197	2.6	259	3.8	343	6.8	290	6.9	178	12.7		
Queens	104	4.3	205	6.2	69	4.3	95	5.0	290	19.3	315	17.5
Sunbury	60	5.0	98	14.0	50	7.1	34	11.1				
York	241	6.9	694	13.3	478	11.4	435	12.7	823	29.4	653	28.4
Carleton	35	3.0	239	6.3	200	5.8	215	6.0	225	9.4	556	18.9
Victoria	13	1.4	60	3.5	66	3.1	202	8.4	502	29.5	736	14.4
T o t a l s	1,453	6.7	3,816	14.0	3,347	15.1	3,183	16.5	3,449	27.8	3,467	23.4

TABLE 8.

Number of Saw Mills in the Region
1840 - 1911

(Canada Census Data)

	1840	1851	1861	1871	1881	1891	1901	1911
St. John	49	51	75	57	52	33	26	27
Kings	68	75	84	68	50	42	14	
Queens	28	24	42	33	16	19	} 15	18
Sunbury	15	12	14	7	7	3		
York	31	35	42	52	41	36	28	23
Carleton	22	12	33	38	34	36	24	29
Victoria		9	15	17	21	24	17	51
T o t a l s	213	218	305	272	221	193	124	148

TABLE 9.

Birth Rates, Death Rates and
Natural Increase (per 1,000 of
population) in the Region,
by Decades for 1851, 1861,
1871, 1881 and 1921.

(Canada Census Data)

<u>Year</u>	<u>Birth Rate</u>	<u>Death Rate</u>	<u>Natural Increase</u>
1851	34.4	10.6	23.8
1861	32.7	9.4	25.2
1871	32.5	12.7	19.8
1881	29.6	15.9	13.8
1921	24.2	13.8	10.6

TABLE 10.

Value of Shipbuilding Products
in the Region, by Counties,
1871 - 1891.

(Canada Census Data)

County	1 8 7 1		1 8 8 1		1 8 9 1	
	Number of Estab- lishments	Value of Product	Number of Estab- lishments	Value of Product	Number of Estab- lishments	Value of Product
St. John	20	538,042	21	414,032	10	107,900
Kings	8	107,800	7	28,600	5	43,400
Queens	6	32,500	2	11,700	9	36,800
Sunbury	2	45,500				
York	-					
Carleton	1	700				
Victoria	-	3,022				
T o t a l s	37	727,564	30	453,732	24	188,100

Table 11.

Censuses of the St. John River during the Period
of French Occupation.

1 6 9 5

Personal.

District	Houses	Barns	Families	Males	Females	Chil- dren	Servants		Total
							Male	Female	
Jemsec	1	1	1	1	1	1	6	2	11
Freneuse	3	1	7	7	4	10	2	1	24
Medocte	1								
Maxouat	3	2	2	3	2	4	4	1	14
Totals	8	4	10	11	7	15	12	4	49

	<u>Agricultural</u>									
	<u>Lands (Arpents)</u>			<u>Crops (bus)</u>				<u>C a t t l e</u>		
	Culture	Pasture	Total	Wheat	Corn	Oats	Peas	Horned	Swine	Poultry
Jemsec	65	30	95	80	30	18	100	22	50	150
Freneuse	44	40	84	50	180	12	48	10,	47	122
Medocte	15		15							
Maxouat	42	3	45		160		22	6	19	90
Totals	166	73	239	130	370	30	170	38	116	362

1 7 3 3

	Families	Males	Females	Children	Total
Village D'Ecoupay	15	14	16	52	82
Freneuse	2	2	2	7	11
Mouth of the St. John	3	3	3	12	18
Totals	20	19	21	71	111

1 7 6 7

	<u>M a l e s</u>		<u>F e m a l e s</u>		<u>Religions</u>	
	Men	Boys	Women	Girls	Cath.	Prot.
Maugerville	77	72	46	65	9	261
St. John River	53	57	40	42	143	29
Totals	130	129	86	107	152	290

SOURCE: Canada Census 1871, Vol. 4.

TABLE 12.

Origin of Immigrants in the Region
and Percent Distribution by Counties
1851.

(Canada Census Data)

	England	Scotland	Ireland	British Possessions	Foreign	T o t a l s	% Counties of Total
St. John	1,133	896	12,872	509	394	15,804	57.0
Kings	372	253	2,718	81	69	3,493	12.6
Queens	173	155	1,377	57	30	1,792	6.5
Sunbury	50	68	809	62	47	1,036	3.7
York	624	410	2,362	74	72	3,542	12.8
Carleton	131	148	1,101	88	89	1,557	5.6
Victoria	78	37	218	118	39	490	1.8
Region Totals	2,561	1,967	21,457	989	740	27,714	100.0
% Total Immigration	9.2	7.1	77.4	3.6	2.7		100.0
New Brunswick Totals	3,907	4,855	28,776	1,550	1,344	40,432	
% Region of New Brunswick	65.5	40.5	74.6	63.8	55.0	68.5	

TABLE 13.

Gainfully Employed in the Region at 1881
Classified by Main Groups according
to Trades

(Canada Census Data)

	Numbers Gainfully Employed in the Region	Percent of Total	Numbers Gainfully Employed in St. John County	Gainfully Employed in St. John County as % of Total
Farming	27,472	48.4	1,465	5.3
Labouring	6,159	10.9	2,365	38.4
Woodworking	3,126	5.5	1,667	53.3
Commerce	3,077	5.4	2,174	70.6
Service	3,029	5.4	1,806	59.6
Clothing and Leather	2,905	5.1	1,692	58.2
Transportation	2,303	4.1	1,647	71.5
Professional	1,820	3.2	646	35.5
Iron and Steel	1,596	2.8	920	57.6
Shipbuilding	1,021	1.8	944	92.4
Building	761	1.3	558	73.3
Food Services	515	0.9	481	93.4
Mineral	263	0.5	174	66.1
Fishing	206	0.4	205	99.9
Milling	173	0.3	23	13.3
Miscellaneous Industries	836	1.5	264	31.6
Other	1,492	2.6	1,242	83.2
T o t a l	56,754	100.0	18,273	32.2

TABLE 14.

Area of Improved Land and Number of Farms in
the Region, by Counties.
1840 - 1931.

(Canada Census Data)

	I m p r o v e d					L a n d		(acres)		
	1840	1851	1861	1871	1881	1891	1901	1911	1921	1931
St. John	19,134	21,725	23,286	29,212	25,158	34,508	16,493	20,427	14,659	12,998
Kings	69,452	120,923	171,030	207,587	189,531	232,345	194,838	198,035	158,152	154,831
Queens	43,089	63,719	85,423	90,150	100,319	111,112) 137,981	91,726	82,282	67,238
Sunbury	12,262	15,587	29,178	36,634	36,902	41,802		32,227	28,042	27,164
York	44,818	69,017	90,413	123,367	132,753	170,531	148,191	154,709	126,153	114,169
Carleton	49,953	55,537	81,247	118,671	150,771	190,561	205,856	228,516	224,146	213,040
Victoria		26,834	33,208	57,031	79,175	100,870	127,385	66,786	76,568	77,645
T o t a l	238,708	373,342	513,785	671,652	714,609	881,728	830,744	792,426	710,002	667,085

		N u m b e r o f F a r m s							
		1861	1871	1881	1891	1901	1911	1921	1931
St. John	880	1,133	1,332	1,346	917	905	622	500
Kings	3,323	3,560	3,862	3,874	3,239	3,374	3,112	2,860
Quéens	1,834	2,009	2,191	2,171) 2,781	1,898	1,911	1,628
Sunbury	791	996	1,016	1,014		949	914	745
York	2,339	3,083	3,544	3,876	3,288	3,590	3,169	2,739
Carleton	2,095	2,689	3,280	3,389	2,947	3,100	2,881	2,570
Victoria	812	1,611	2,301	2,736	2,875	1,628	1,618	1,447
T o t a l	12,074	15,081	17,526	18,406	16,047	15,444	14,023	12,489

TABLE 15.

Regional Type of Farming Ratios
1860 - 1931

(Canada Census Data)

	Per Farm	1861	1871	1881	1891	1901	1911	1921	1931	N.B. 1931
Number of Farms										
Occupied Land	acres	171.1	144.3	124.9		153.0	147.3	149.8	161.4	122.0
Improved Land	acres	42.6	44.5	40.8	47.9	51.8	51.3	50.6	53.4	39.1
Field Crops	acres		29.6	27.5		33.0	34.0	33.9	27.3	28.2
Horses	no.	1.6	1.6	1.7	2.5	2.1	2.1	2.1	1.9	1.6
Cows	no.	3.3	3.2	3.7	3.3	3.9	3.6	3.7	3.9	3.0
Other Cattle	no.	4.2	2.7	3.2	2.8	3.6	3.2	3.8	3.1	3.4
Sheep	no.	9.5	7.4	6.3	5.3	6.0	4.6	5.5	4.5	4.2
Swine	no.	3.1	1.8	1.3	1.4	1.6	2.9	2.6	3.2	2.6
Hens					16.9	20.9	29.2	33.9	47.9	42.0
Other Poultry										
Wheat	acres		0.3	1.0	0.2	0.4	0.3	0.3	0.2	0.2
	bus	5.3	4.4							
Barley	acres				0.1	0.1	0.07	0.1	0.4	0.3
	bus	1.6	0.7	1.1	2.2					
Oats	acres				5.2	7.2	6.8	7.6	8.7	6.4
	bus	128.5	116.2	116.4	108.6					
Hay	acres		13.1	13.0	15.3	20.6	22.5	21.6	24.9	17.4
	Tons	15.9	13.6							
Potatos	acres		1.4	1.3	0.9	1.0	1.1	2.3	2.6	1.8
	bus	126.3	193.4							
Gardens and Orchards	acres		0.3	0.3		0.5	0.8		0.5	

TABLE 16

Trade of New Brunswick

Canada Year Book 1867 - page 82

	I m p o r t s (\$ 000)									
	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865
United Kingdom	2,585	2,578	1,720	2,269	2,286	1,713	1,965	2,584	3,598	2,284
U.S.A.	3,430	3,017	2,708	3,120	3,303	3,015	2,961	3,550	3,317	3,056
Canada		187	156	157	191	197	191	177	245	247
Nova Scotia		721	825	866	917	797	862	1,094	1,360	1,071
Other	1,287	308	172	385	247	221	221	253	425	429
T o t a l	7,302	6,811	5,581	6,797	6,944	5,943	6,200	7,658	8,945	7,087

	E x p o r t s (\$ 000)									
United Kingdom	3,589	2,997	2,566	3,439	2,626	3,077	2,284	2,888	2,733	2,595
U.S.A.	832	761	786	1,133	1,192	843	889	1,245	1,266	1,737
Canada		4	8	36	45	54	48	43	60	86
Nova Scotia		374	286	302	306	286	341	400	557	569
Other	731	269	246	242	230	286	295	365	438	548
T o t a l	5,152	4,405	3,892	5,152	4,399	4,546	3,857	4,941	5,054	5,535

TABLE 17.

New Brunswick Exports, by Main
Groups. 1862-1865.

Canada Year Book 1867 - Page 84.

	1862	1863	1864	1865	Total	% Group of Total
	\$	\$	\$	\$	\$	%
Forest Products	2,787,020	3,651,720	3,399,052	3,643,522	13,481,314	52.8
Ships	1,180,200	1,950,600	1,760,400	1,257,900	6,149,100	24.2
Fish Products	303,477	265,724	305,682	412,127	1,287,010	5.0
Mineral Products	220,183	270,566	324,359	293,744	1,108,852	4.3
Animal Products	41,760	26,373	56,257	72,651	197,041	0.8
Manufactured Products	37,146	41,043	19,112	50,675	147,976	0.6
Agricultural Products	11,738	24,709	27,017	103,610	167,074	0.6
Other Products	455,214	661,096	922,126	958,399	2,996,835	11.7
T o t a l	5,036,738	6,891,831	6,814,005	6,792,628	25,535,202	100.0

TABLE 18.

Exports of Timber Products from New Brunswick
1824 to 1865
(Chiefly through Saint John)

	Units	1824	1834	1845	1865
Masts and Spars	No.	5,992	4,292	2,602	-
Oars	Pairs	4,434	8,564	2,117	-
Handspikes	No.	3,524	1,140	-	-
Staves	M.	3,813	486	1,008	-
Square Timber	Tons	324,211	184,747	244,864	43,143
Lathwood	Cords	6,410	3,666	4,206	-
Planks, Boards and Deals	M feet	21,383	36,811	138,397	334,419
Shingles	M.	2,911	5,856	8,371	94,332
Laths	M.	2	-	1,805	31,589
Box Shooks	No.	-	-	-	581,120

SOURCES:

1824 : Fisher, Peter "The First History of New Brunswick", page 79
1834 : Martin, R.M. "A History of Nova Scotia", page 172 (1836)
1845 : Gesner, A. "New Brunswick", page 301
1865 : Canada Year Book, 1867.

TABLE 19.

Saw Mill Products in the Region
by Value and County Percentages
1871 - 1911.

(Canada Census Data)

Counties	1871	% of Total Value	1881	% of Total Value	1891	% of Total Value	1901 ¹	% of Total Value	1911 ¹	% of Total Value
	\$		\$		\$		\$		\$	
St. John	2,632,892	64.1	2,621,365	72.4	2,767,262	68.9	1,448,337	44.9	2,536,917	43.5
Kings	291,191	7.1	155,345	4.3	271,220	6.7	118,043	3.7	- (2)	
Queens	197,390	4.8	22,235	0.6	68,250	1.7	174,165	5.4	384,900	6.6
Sunbury	53,200	1.3	17,600	0.5	7,412	0.2				
York	682,165	16.6	591,915	16.3	553,366	13.8	733,576	2.8	722,455	12.4
Carleton	193,260	4.7	168,425	4.6	179,860	4.5	191,913	6.0	928,075	15.9
Victoria	55,980	1.4	48,139	1.3	171,520	4.3	554,287	17.2	1,260,402	21.6
T o t a l	4,106,078	100.0	3,625,024	100.0	4,018,890	100.0	3,220,321	100.0	5,832,749	100.0

1. Includes Log Products, Lumber and Lumber Products.

2. Not available except combined with Albert County.

TABLE 20.

Ship Tonnage built in New Brunswick by
5 year averages
1826 - 1889

Period	Tonnage	<u>Index</u> 1826-30 = 100
1826-30	17,355	100
1831-35	18,084	104
1836-40	39,213	226
1841-45	27,602	159
1846-50	37,291	215
1851-55	66,682	384
1856-60	51,498	297
1861-65	66,514	383
1868-70	30,663	177
1871-75	41,429	239
1876-80	28,977	167
1881-85	19,046	110
1886-89	5,014	29

SOURCES:

- 1826-1860 : Innis and Lower, "Select Documents in Canadian Economic History", 1933, page 426.
1861-1865 : Canada Year Book 1867, page 56.
1868-1889 : Trade and Navigation Reports, Table 9.

TABLE 21.

Value of Manufacturing Production
and Capital Invested in the Region,
by Counties, 1871-1911

(Canada Census Data)

Value of Product

	1871	1881	1891	1901 ¹	1911 ¹
	\$	\$	\$	\$	\$
St. John	8,312,627	7,648,067	10,240,799	8,275,555	11,179,491
Kings	869,331	562,508	692,245	407,638	- (2)
Queens	430,674	96,287	246,239) 179,012	464,880
Sunbury	176,727	66,280	35,737		
York	1,345,018	1,524,717	2,091,969	1,943,046	2,958,244
Carleton	778,330	624,960	848,118	1,032,590	2,045,098
Victoria	147,118	163,049	287,065	520,265	1,522,187
T o t a l	12,059,825	10,685,868	14,442,172	12,358,106	18,169,900

Capital Invested

	\$	\$	\$	\$	\$
St. John	2,275,377	3,966,079	3,137,914	7,145,645	11,140,395
Kings	308,069	329,055	235,755	382,771	- (2)
Queens	176,280	49,332	70,853) 178,058	358,010
Sunbury	64,122	33,510	21,133		
York	495,896	585,100	1,301,263	2,719,704	3,031,822
Carleton	267,510	279,574	341,968	841,922	1,451,080
Victoria	61,207	75,654	128,249	608,482	1,124,921
T o t a l	3,648,461	5,318,304	5,237,135	11,876,582	17,106,228

1. Includes only establishments employing more than 5 hands.

2. Not available except combined with Albert.

TABLE 22.

Average Per Farm Numbers of Livestock and
Acres of Crops, by Provinces. Census 1931

		Nova Scotia	Prince Edward Island	New Brunsw- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
Horses	(Nos.)	1.1	2.3	1.5	2.2	3.0	6.0	7.3	7.5	2.2
Cows	"	2.7	3.5	2.9	6.2	5.8	5.2	3.5	4.5	3.9
Other Cattle	"	2.8	4.3	3.3	6.3	7.3	7.2	5.2	7.0	5.0
Sheep	"	5.0	6.1	4.2	5.4	5.4	4.0	2.0	8.1	5.6
Swine	"	1.1	3.2	2.5	5.4	7.1	7.2	6.9	10.8	2.0
Hens	"	31.6	67.9	37.7	57.8	117.2	92.7	78.1	77.3	164.0
Wheat	(acres)	.07	1.6	.2	.3	3.3	48.3	110.1	81.5	2.5
Barley	"	.2	.3	.3	.7	2.3	20.8	10.1	7.3	.4
Oats	"	2.2	11.6	6.4	12.2	12.3	28.0	31.5	25.3	3.3
Hay	"	10.7	18.3	17.4	27.7	19.3	5.4	1.3	3.0	7.4
Potatos	"	.6	4.2	1.8	1.1	.9	.7	.3	.4	.8

Table 23

Birth Places of the People in the Region, and
% Distribution by Decades 1861-1931

Canada Census

Year	New Brunswick	Canada	England	Ireland	Scotland	United States	Other
1861	104,589 ¹		3,348	22,570	2,427	²	6,354
1871	119,050	3,878	3,160	16,898	2,176	2,321	1,086
1881	141,646	5,364	2,936	12,204	2,435	3,121	988
1891	142,166	4,732	2,755	7,083	1,816	2,730	993
1901	146,784	5,064	2,527	3,872	1,199	3,674	1,289
1911 ²							
1921	144,546	6,874	4,750	933	1,275	3,881	2,595
1931	145,133	7,681	5,077	918	2,055	3,810	3,118

Percent Distribution of the People in the Region,
by Place of Birth, 1861-1931.

1861	75.2 ¹		2.4	16.1	1.7	²	4.6
1871	80.0	2.6	2.1	11.5	1.5	1.6	0.7
1881	83.9	3.1	1.7	7.2	1.4	1.8	0.9
1891	87.5	2.9	1.6	4.3	1.1	1.6	1.0
1901	89.2	3.0	1.5	2.3	0.6	2.2	1.2
1911							
1921	87.3	4.2	2.8	0.5	0.8	2.3	2.1
1931	86.4	4.5	3.0	0.5	1.2	2.3	2.1

(1) Includes those born in Canada

(2) Not recorded

TABLE 24.

Statistics of Banks in the Region
1840 and 1866

	1 8 4 0		1 8 6 6		
	Paid up Capital	Paid up Capital	Circulation	Specie	Deposits
<u>In Saint John</u>	\$	\$	\$	\$	\$
Bank of New Brunswick	100,000	600,000	361,417	167,185	765,330
Commercial Bank	150,000	600,000	323,829	31,852	215,995
Bank of British North America	1,000,000	600,000	250,000	100,000	300,000
City Bank	50,000				
T o t a l s	1,300,000	1,800,000	935,246	299,037	1,281,325
<u>In Fredericton</u>					
Westmorland Bank		60,000	89,712	9,303	27,522
Peoples Bank		60,000	99,157	35,345	55,396
Central Bank	15,000				
T o t a l s	15,000	120,000	188,869	44,648	82,918

SOURCES: 1840 - Gesner, A. "New Brunswick", page 313. 1866: Canada Year Book 1867.

TABLE 25.

Number of Churches in the Region
1840 - 1861.

(Canada Census Data)

C o u n t y	1 8 4 0	1 8 5 1	1 8 6 1
St. John	28	40	56
Kings	34	61	88
Queens	19	40	50
Sunbury	8	15	20
York	30	45	67
Carleton	19	25	40
Victoria		8	10
T o t a l	138	234	331

TABLE 26.

Temperatures¹ at Saint John and Fredericton

	S a i n t J o h n					F r e d e r i c t o n				
	Mean	Mean Maximum	Mean Minimum	Extreme Maximum	Extreme Minimum	Mean	Mean Maximum	Mean Minimum	Extreme Maximum	Extreme Minimum
January	19	28	10	53	- 21	13	23	2	55	- 35
February	20	28	12	50	- 19	15	26	3	53	- 35
March	28	36	21	58	- 10	26	36	16	65	- 27
April	39	46	31	75	6	39	49	28	83	- 5
May	48	56	41	87	26	51	62	39	92	24
June	56	64	49	87	35	60	72	48	96	27
July	61	68	54	89	41	66	77	55	96	38
August	61	68	54	89	42	64	75	53	95	32
September	56	63	49	87	32	56	67	45	92	23
October	47	54	40	75	21	45	55	36	82	13
November	36	42	30	62	- 9	32	40	24	68	- 16
December	24	32	16	54	- 20	19	28	10	58	- 31
Year	41	49	34	89	- 21	41	51	30	96	- 35

(1) Fifty Year Observations.

TABLE 27.

Sex Ratios in the Region by Age Groups,
(0-15 years and over 15 years)
1824 - 1861

	<u>1 8 2 4</u> <u>0-15 over 15</u>	<u>1 8 3 4</u> <u>0-15 over 15</u>	<u>1 8 4 0</u> <u>0-15 over 15</u>	<u>1 8 5 1</u> <u>0-15 over 15</u>	<u>1 8 6 1</u> <u>0-15 over 15</u>
St. John	110 143	113 112	105 111	102 103	103 106
Saint John	106 100	101 91	101 89	100 87	100 87
Kings	106 122	105 109	110 113	108 107	105 112
Queens	101 116	101 116	95 116	105 112	106 114
Sunbury	105 127	106 127	109 118	108 112	102 125
York	107 126	102 125	104 123	106 114	104 122
Fredericton	90 112	104 97	104 91	98 94	101 89
Carleton		101 122	107 119	109 113	106 123
Victoria				103 118	102 116
T o t a l s	108 120	104 110	104 107	104 103	103 108

TABLE 28

Regional Sex Ratios, by Counties 1824 - 1931
(Men to 100 Women)
Saint John and Fredericton shown separately.

(Canada Census Data)

	1824	1834	1840	1851	1861	1871	1881	1891	1901	1911	1921	1931
St. John County	127	112	108	102	105	101	107	110	114	111	107	108
Saint John	100	94	93	92	92	90	90	92	89	91	90	91
Kings	114	107	110	107	109	106	104	104	106	104	106	108
Queens	124	107	105	109	111	110	108	109	106	108	112	117
Sunbury	120	116	114	110	114	111	108	115	114	114	112	114
York	116	112	113	110	114	109	109	107	108	110	110	110
Fredericton	101	99	96	95	94	91	88	89	91	87	88	87
Carleton		110	113	111	115	108	107	106	105	106	107	108
Victoria				109	109	114	117	112	120	122	113	112
T o t a l s	114	106	106	104	106	103	102	102	102	103	103	103

TABLE 29.

Age Groups 0-15 Years as Percentage
of the Total Population in the Region
by Counties
1824 - 1861

(Canada Census Data)

	1824	1834	1841	1851	1861
St. John	43.1	47.3	44.2	44.2	42.9
Saint John	41.5	50.2	42.8	43.0	40.6
Kings	48.2	50.3	46.5	44.7	42.8
Queens	51.8	50.9	49.3	41.6	43.3
Sunbury	43.9	48.5	49.3	48.6	41.7
York	49.0	50.2	49.8	45.9	44.1
Fredericton	42.7	45.6	42.2	42.7	38.9
Carleton		53.1	50.9	47.1	43.7
Victoria				50.7	50.9

TABLE 30

Number of Schools and Enrolment
in the Region, by Counties
1851 - 1871

County	1 8 5 1		1 8 6 1		1 8 7 1		Average Attendance
	Number of Schools	Enrol- ment	Number of Schools	Enrol- ment	Number of Schools	Enrol- ment	
St. John	108	1,992	62	7,420	128	6,465	3,627
Kings	98	1,912	143	2,978	100	3,283	1,592
Queens	54	1,180	80	1,606	58	1,761	893
Sunbury	24	556	38	809	22	698	360
York	67	1,701	91	2,839	75	2,637	1,412
Carleton	56	1,173	63	2,274	69	2,375	1,227
Victoria	16	295	23	550	34	913	538
T O T A L	423	8,809	500	18, 476	486	18,132	9,649

Sources: 1851 and 1861 - Canada Census 1871, Vol. 4
1871 - Report of the Superintendent of Schools, N.B.,
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