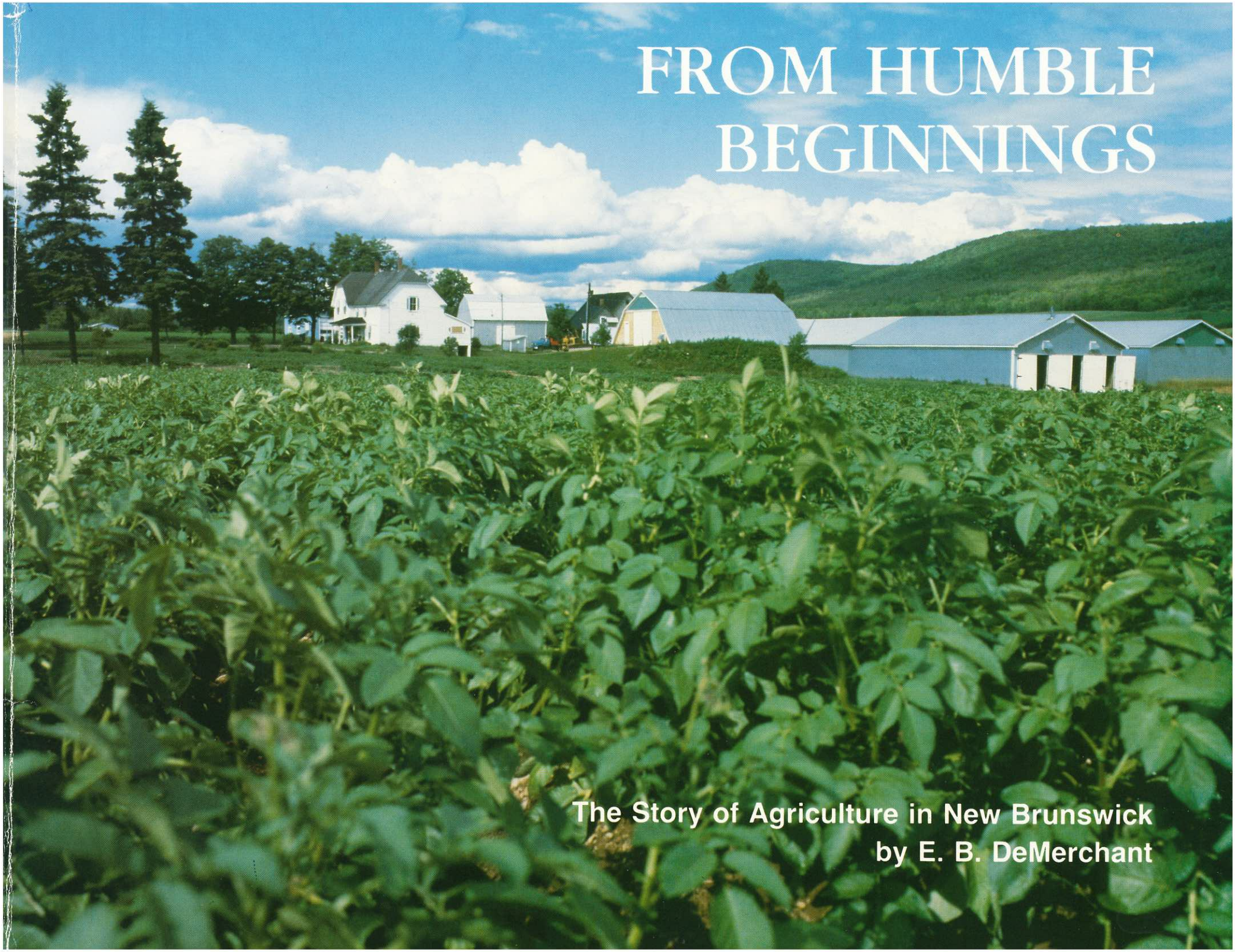
FROM HUMBLE BEGINNINGS
The Story of Agriculture in New Brunswick
by E. B. DeMerchant

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Layout and design by Phil Brannon.

DEDICATION

To the Farmers and their families of New Brunswick.

A joint publication by the New Brunswick Department of Agriculture and Rural Development and the New Brunswick Federation of Agriculture in recognition of the 1984 Bicentennial of the Province of New Brunswick.

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PREFACE

The New Brunswick Federation of Agriculture has been proud to work with the New Brunswick Department of Agriculture in documenting this story of agriculture in our province.

Since early on, organizations of farmers have worked hard to achieve goals and to promote the development of their industry. The early formation of agricultural societies and other groups such as the N.B. Farmers and Dairymen's Association were the forerunners of the Federation we have today.

Agriculture was and continues to be an integral part of our provincial economy. There are few occupations that have as much direct impact on everyone as the production of food. We are privileged to live in a society where food is plentiful.

The story of agriculture documented here in "From Humble Beginnings" is a proud record of dedicated people over the last three hundred years. Farmers of the land can be truly proud of their unique heritage.

George Slipp,
President, N.B. Federation
of Agriculture.

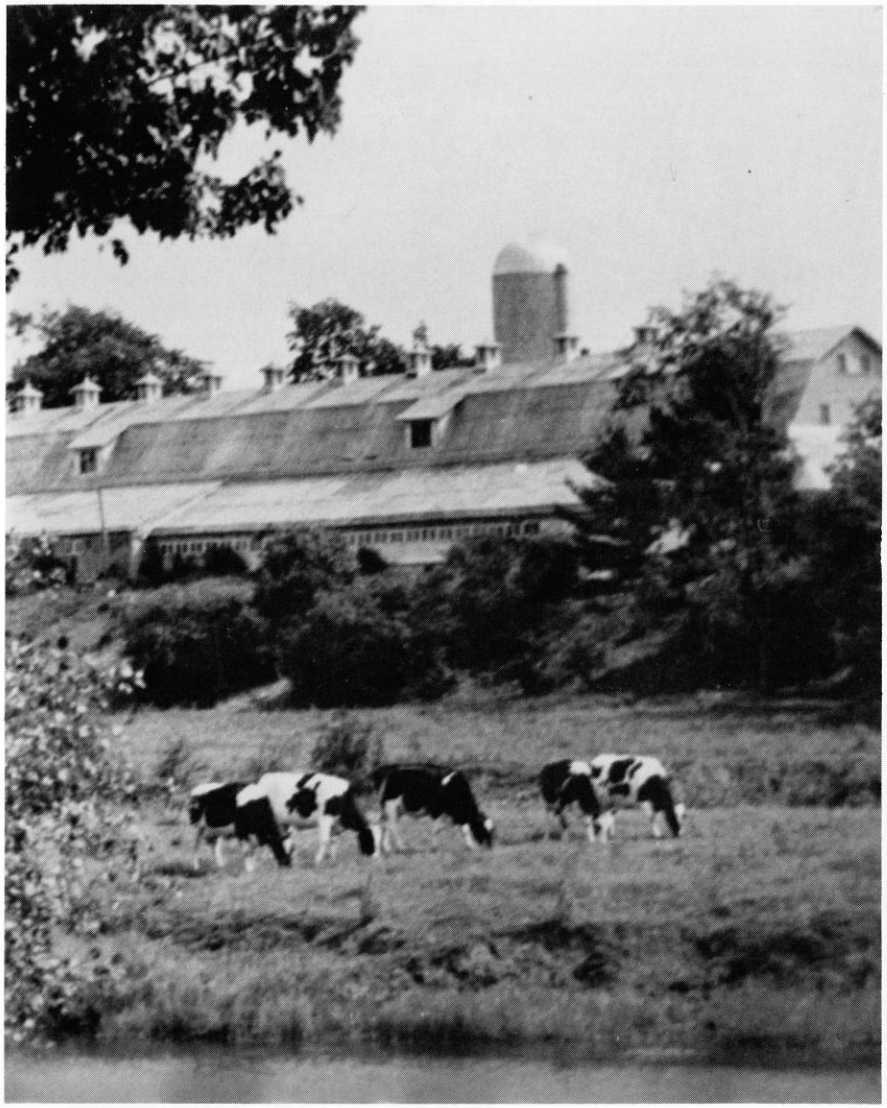
The story of agriculture in New Brunswick is one of perseverance and hard work by a great many dedicated people. From the earliest settlements carved from the wilderness to the modern farms of today, there have been struggles, disappointments, triumphs and drama.

This book provides insights into the forces that shaped the agricultural base in New Brunswick over the past three centuries. It is important to understand the past and to recognize the early contributions of those who chose the land to make their livelihood.

The Bicentennial of New Brunswick provides us the opportunity to examine our past, appreciate the present and plan for the future. The changes in technology over the past few years must be adopted and used to full advantage if we are to compete with other agricultural areas in the next century.

"From Humble Beginnings . . . the Story of Agriculture in New Brunswick" has resulted from the cooperation between the Department of Agriculture and Rural Development and the New Brunswick Federation of Agriculture. It has involved a great deal of effort to bring it together and tell the story of agriculture which remains an important part of our provincial economy.

Hon. Malcolm N. MacLeod,
Minister of Agriculture and
Rural Development.



INTRODUCTION

There is a common denominator to the development of all great nations. A strong agricultural base had to be in place to permit the social developments to take place and society to flourish.

This is the story of agricultural development in New Brunswick from the first garden planted on St. Croix Island in 1604 up to the present. It is not a chronological catalogue of events but more the story of human struggles and endurance, creativity and faith. This is a record of change, progress and disappointments that shaped the farming community we have today in this province.

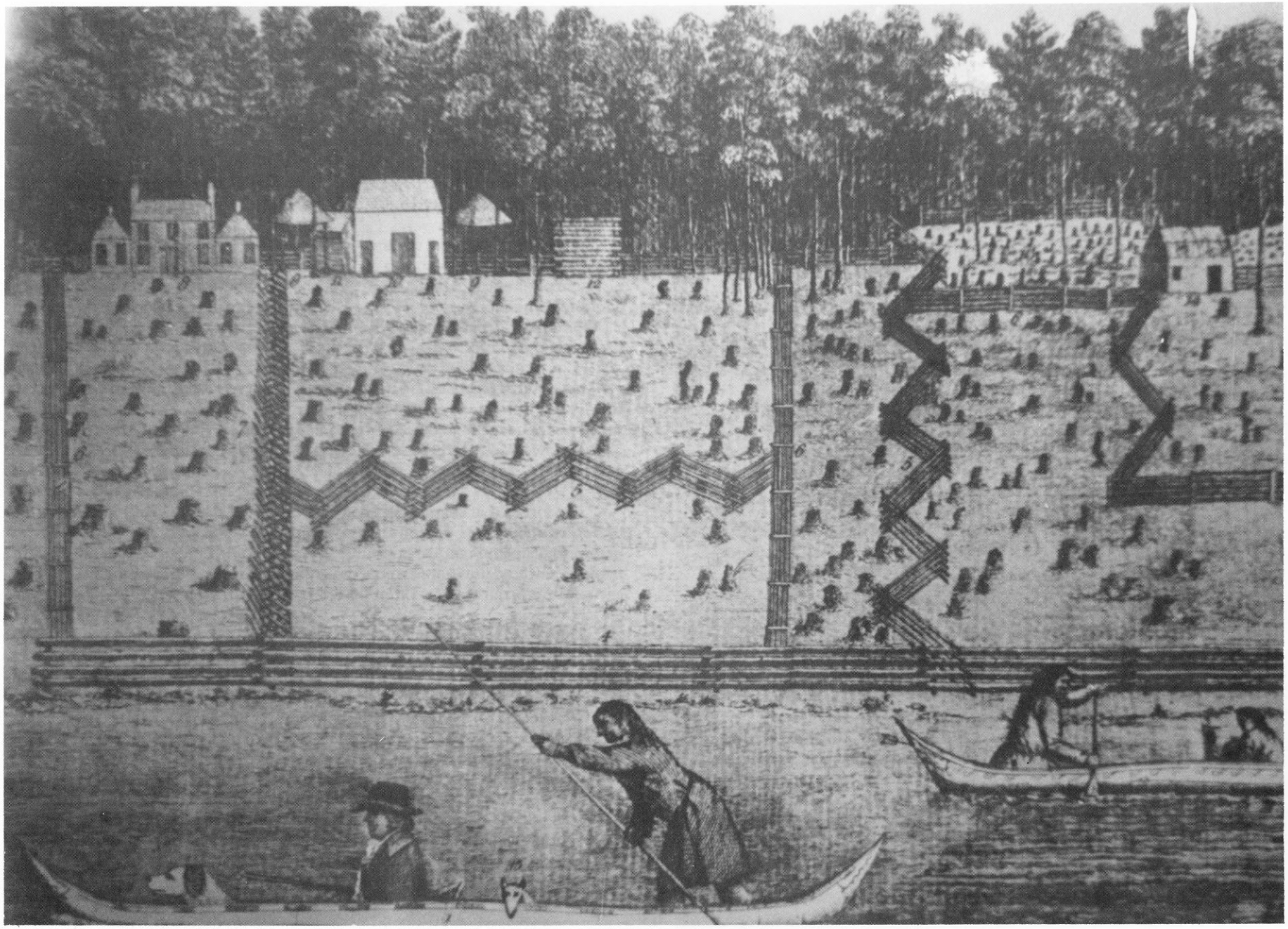
It should have been easy to find information on agriculture in New Brunswick but it was not. The main reason for a lack of details on the early years was the fact that almost everyone was involved in growing at least part of their own food and that made it too commonplace to record in diaries and letters.

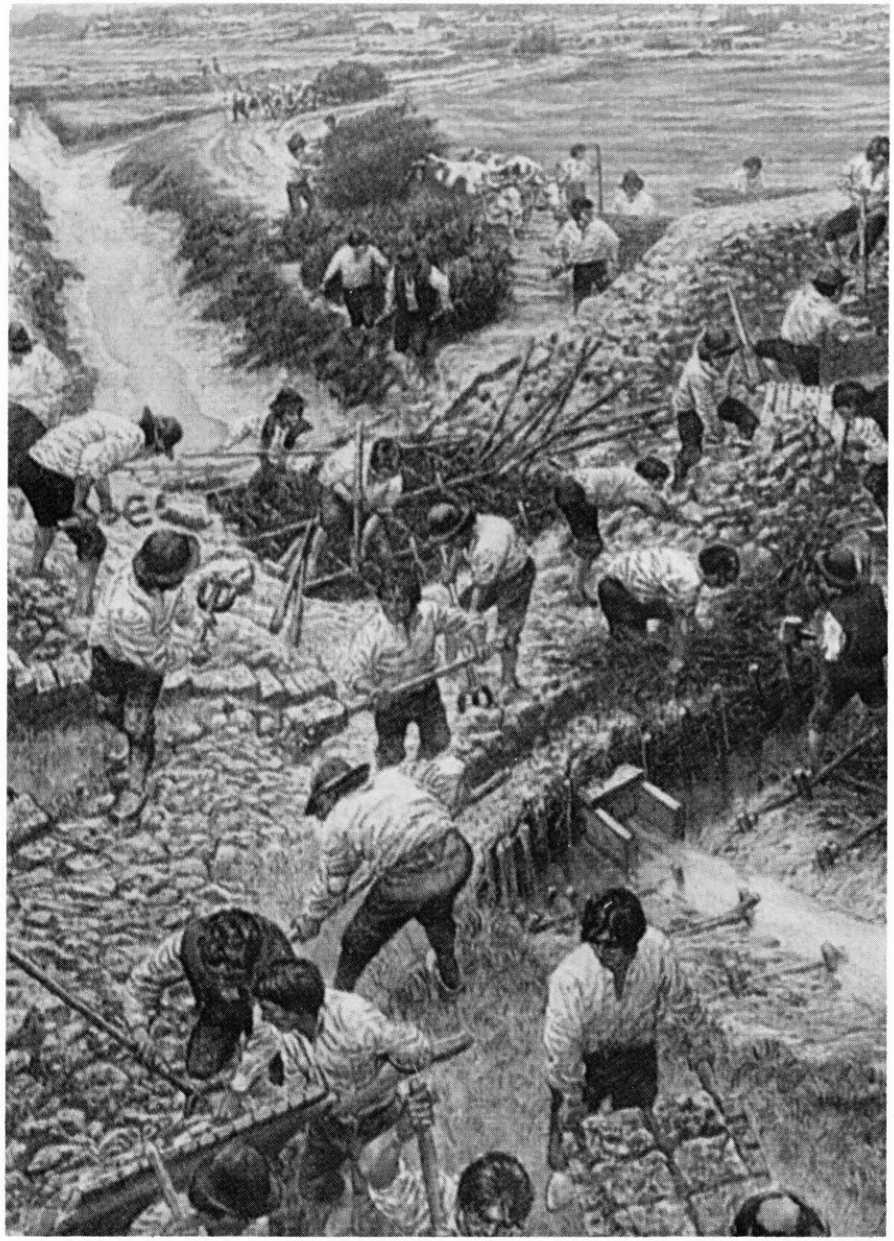
The forces that shaped the early days of colonialization in New Brunswick were external rather than internal. Wars born in Europe in the vast cauldron of imperialism and empire building had far reaching effects which often swept hapless settlers into situations they did not understand or control. Early agricultural progress was often halted by these incidents.

This book is the product of the work of many people and organizations. The New Brunswick Federation of Agriculture encouraged its writing as a Bicentennial tribute to the farmers of this province. Through cooperation between the Department of Agriculture and the Federation its concept grew from an idea to a reality in a relatively short time. The story has no ending because agriculture is still evolving in this province and will continue to do so in the future.

Farmers have a strong bond with their land. Their optimism and faith means the crops go in each year and come out in the fall. The modern swirl of technology has been adopted by them to do a better job and produce more food each year. Where would we be without them?

E.B. DeMerchant,
Fredericton, N.B.





Claiming the land from the sea was easier than clearing the heavy forest for farms. The early Acadian settlers were familiar with marshland farming and used this valuable soil for their first farms.

THE BEGINNING

1604-1755

The royal palaces of Europe were excited by the reports of early voyagers to the New World. Dreams of empire and wealth tempted the courtiers of the dawning seventeenth century and fired the adventurous spirits of many who saw the possibilities for trade with the Indian population and for the establishment of settlements.

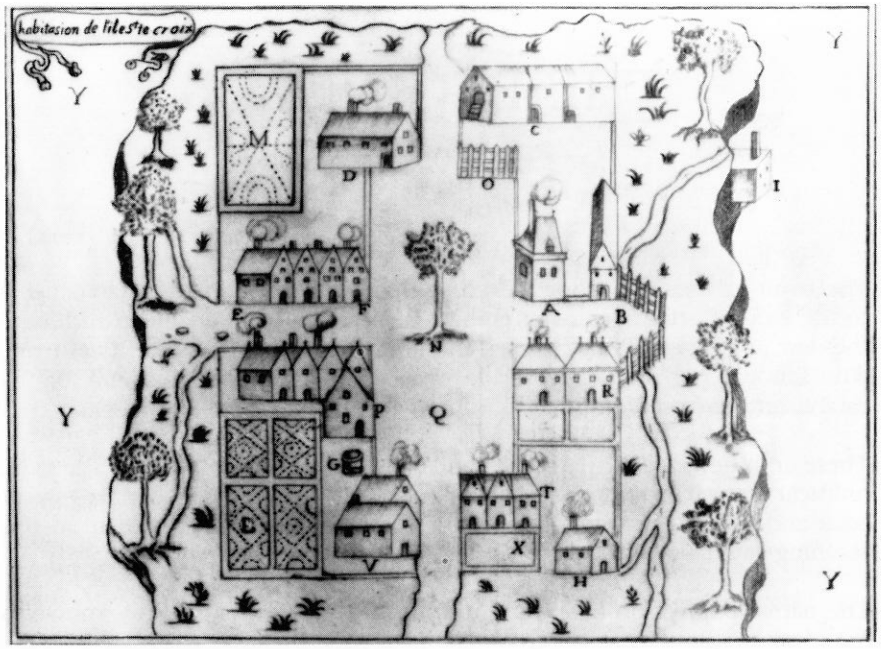
These ambitions, particularly in France and England, would ignite wars and political turmoil for years to come as the struggles for colonial empires swept back and forth across much of northeastern North America. But from this seething cauldron would emerge new nations and a new society.

The native population the early Europeans found in what is now known as the Maritime Provinces were, for the most part, friendly. They lived off the land and aside from planting small patches of Indian corn, preferred to wander to eke out a living rather than farm.

It was left to Sieur De Monts, a well-placed gentleman in the service of King Henry IV of France, to fire popular imagination and obtain a patent from his sovereign to establish a post in the New World. His motives were to cash in on the growing fur trade and to promote settlements. In the wording of his commission from the king, De Monts was "to do generally whatsoever may make for the conquest, peopling, inhabiting and preservation of the said land of Acadie". With this in hand, De Monts convinced many wealthy merchants to participate in his adventure and was joined by several gentlemen of noble birth on the voyage in the four ships he made ready in late 1603.

We owe much of what we know of the first years of the French colonists to Samuel de Champlain, a geographer and faithful historian who accompanied De Monts on the trip. Two of the vessels went to trade furs in the St. Lawrence and Cape Breton areas while the other two carried the foundations for a new community.

The party assembled for the trip numbered about 120 people and it is interesting to note that among their numbers were "agriculturalists, artisans, priests, Hugenot ministers and gentlemen". The two ships that sailed under De Monts also carried arms and munitions, seeds, tools, building materials and as many of the necessities of life as possible.



The selection of this small Island called St. Croix as the first European settlement in New Brunswick proved a disaster. Champlain left this drawing of the 1604 beginning.

The expedition sailed on march 4, 1604 and, after a month at sea, sighted the land of the New World. After time spent exploring — De Monts named St. Mary's Bay and Port Royal in the Annapolis Basin, — the party sailed around the Bay of Fundy until coming to St. Croix Island in the extreme western end. De Monts decided to establish a permanent settlement with a fort for protection and a trading post to purchase furs from the Indians.

The winter was a disaster! The severity of the cold and the frequent snow storms added to the hardships of those who became ill, possibly from malnutrition, and 35 of the 79 souls that wintered there perished.

It must have been a very disheartened De Monts who loaded his small ship in the spring of 1605 and moved the colony across the Fundy to Port Royal. The arrival of Pontgrave, one of the original travellers with De Monts on the trip who had gone back to France, with supplies and 40 additional colonists helped revive their sagging spirits.

With a permanent home, good soil and plenty of water, agriculture could begin in the New World. We are indebted again to Champlain for his journal which records the fledgling establishment in the summer of 1605.

"In 1605," he wrote, "40 or 45 who stayed began to make gardens. I, also, made one which I surrounded with ditches full of water wherein I placed fine trout. The seed throve well."

The following year Baron de Poutrincourt arrived from France with a land grant from the king for the Port Royal area and became the first proprietor in our area of the New World. More importantly, he brought more implements and seed to the colony along with nursery stock, farm animals, supplies and additional colonists. The first apple trees were probably on the ship as well.

Land clearing and the testing of various crops began in earnest. From the old journals we learn that fences were erected to keep the hogs out of the plots — the first reference to swine in America — and the grain crop proved rewarding. Work began on the first water wheel to grind the grain for flour and from this cradle of farming, the wheat growing industry along with the milling of it came to the New World.

For a new beginning, the crops were quite diverse. Marc Lescarbot recorded that "God has blessed our labors and given us fair wheat, rye, barley, oats, peas, beans, hemp, turnips, herbs and this so plentifully the rye was as high as the tallest man".

So well were the agricultural pursuits of the new colony progressing that Poutrincourt sailed back to France late in 1607 with the first samples of the crops. A delighted King Henry received special packages and promptly awarded an "exhibition premium" in gratification for the Acadian display shown him.

The king was delighted with five Acadian geese hatched from eggs taken from the wild by the colonists and these were placed on display in the Royal Gardens at Fontainebleau.

Had peace endured, what progress could have been made in agriculture in that fertile area! The calm was shattered in 1613 when the English plundered and burned Port Royal and carried off much of the livestock. The loss was discouraging and Poutrincourt, the firm backer of the venture, gave up.

Although French colonists continued to exist in the Port Royal area, the initial impetus of the colony diminished and the threat of punitive action by the English made for an uneasy climate. In 1621, war broke out between France and England and the land known as Acadia was captured by the English. Although some attempts were made at colonization, the treaty ending the war in 1632 restored Acadia to France.

Although the peace was restored, tranquility was not. In-fighting between the various French leaders in Acadia often led to armed conflicts. In 1667 Acadia had changed hands again. After capture by the British, it was returned to the French.

Acadian farmers haying on the Tantramar. Note the oxen being used. Horses did not become generally in use on farms for heavy work until after 1850. (Courtesy of Parks Canada).

The Tantramar Saga

The restlessness of the political struggles must have puzzled and confounded the settlers who wanted to get on with working the land and building homes in the new country they had chosen. By the census of 1693, the population of all of Acadia was set at 1009 of which half still resided at Port Royal.

Although the French had spread out in the land now known as New Brunswick — Nicolas Denys had a trading post near Bathurst in 1658 — agriculture was not predominant.

The problems with wars and internal conflicts prompted Jacob Bourgeois to move with a few followers from Port Royal to the Chignecto Isthmus in 1672. These predominantly peasant farmers began the task of reclaiming marshland from the sea to raise their crops. Their first settlement was Beaubassin and another was set in place near Aulac in 1686.

The marshes produced an abundance of grasses where the salt water did not inundate them on a regular basis. The early settler on the Tantramar built dykes from evergreen boughs and the marsh silt to keep out the sea. Where pounding waves hit, log facings were put in place. An ingenious device made from a wooden box with a trap door controlled the water flow. The gate pushed open when the tide fell allowing the fresh water to drain from the land, but closed when the tide came in.

Old records show the settlers grew rye, flax, barley, hemp and corn on the marsh for themselves and their livestock. The census of 1689 compiled by a priest and returned to France showed the Chignecto with a population of 73 men, women and children. They had increased their livestock to 188 horned cattle, 157 sheep and 85 hogs. On 87 arpents (aboug 130 acres) of land they planted their crops.

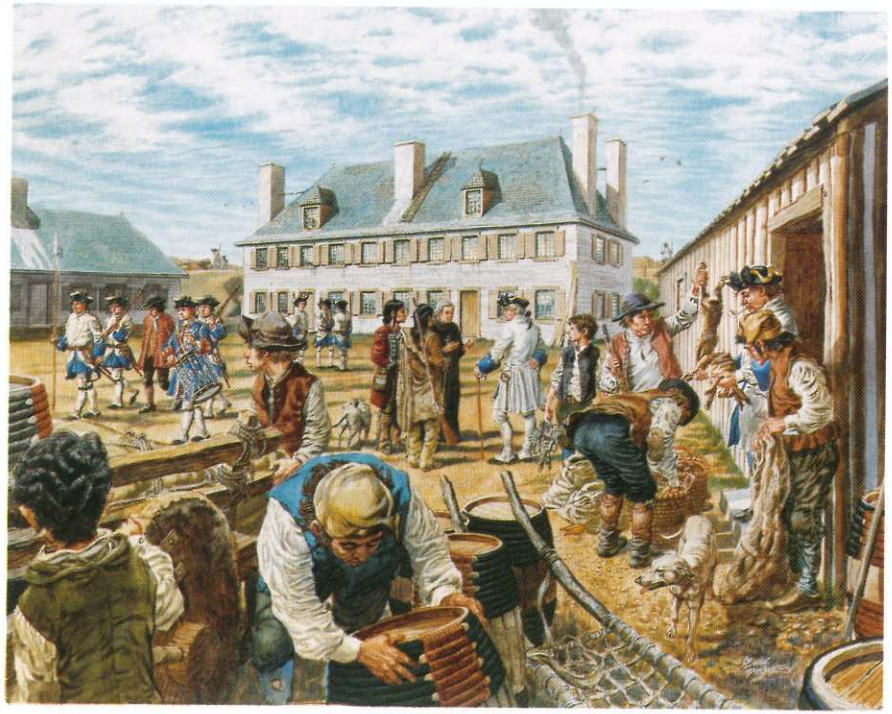
Sieur de lamothe Cadillac, who later founded Detroit, visited the area in the 1690's and noted tobacco growing well. He wrote of the soil that "the grass grows to the heights of a man".

Another visitor to the area in 1731 was Robert Hale. He wrote that "there is abundance of muskettoes here so that in a calm, hot day, tis impossible to live especially among the trees".

Although his intentions were at times very good, the Abbe le Loutré was a radical who was involved in the Tantramar area about this same time. He undertook a resettlement program in 1750 to ensure the French settlers lived in the part of Acadia still under control of the French crown. The priest and Indian followers burned the village of Beaubassin to force the settlers to move across the Missaguash River near where Ford Beausejour stands today.

Translation is from Denys' Description of the Natural History of the Coasts of North America (Acadia), translated and edited by W. F. Ganong, 1908, Champlain Society, page 213.

"My establishment of Nepigiguit is on the border of this basin, at a league to the right of its entrance! At low water, a canoe can scarcely approach it. It is there I have been obliged to retire after the burning of my Fort of Saint Pierre in the island of Cape Breton. My house is flanked there by four little bastions, with a palisade of which the stakes are eighteen feet in height with six pieces of cannon in batteries; the lands there are not of the best, there are rocks in some places. I have there a large garden, the earth in which the land is good for vegetables, which come up in a marvellous way. I have sown seeds of pears and apples, which have come up and are well established although this is the coldest place that I have, and the one where there is most snow. The peas and the wheat come passably well, the raspberries and strawberries are abundant everywhere." (1672-Nicholas Denys)



Acadian farmers from the Tantramar marshes found a market for their production and wild game at the military commissary of Fort Beausejour. (Painting by Lewis Parker, courtesy Parks Canada.)

Le Loutré managed to persuade the French government to grant 50,000 livres to him to construct dykes and an aboiteau to drain more of the marshland for farming. The settlers had to perform much of the work on this ambitious project. So much labour was required that construction of Fort Beausejour was delayed and it was captured by the British before it could be completed.

Although the fishery was the main concern of France, agriculture was needed to support the growing population. Settlements were established on the Saint John River before 1695 by Louis d'Amours and settlers pushed their way into the Shepody and Petitcodiac areas before that.

1755 marked the end of France as a colonial power in Acadia. War, the inevitable struggle between powers after the same spoils during the period, came again to the farmers of the marshes.

PETITCODIAC SETTLEMENT

In the spring of 1698, Pierre Thibaudeau, the miller of Prèe-Ronde, in a little vessel he and his sons had built in the Annapolis River, sailed with the tide into Shepody Bay. How far up the Petitcodiac River Pierre Thibaudeau sailed we do not know, but he evidently sailed far enough up to see that there were plenty of rich tidal flats waiting to be won from the turgid waters, for he brought a friend with him when he came back in July of the same year. For himself, the miller of Prèe-Ronde chose the land on the left, after he had sailed around St. Mary Point, at the entrance to Shepody Bay, where the Shepody River takes a tortuous course through the red mud, the same type of red mud as that with which he ws familiar at his round meadow on the Annapolis River.

On his expedition, which had been undertaken in the hope of finding unoccupied lands on which he might establish his family and found a seigneury before he died (he was sixty seven years of age at the time), Pierre Thibaudeau had brought with him four of his seven sons, and one of their friends, Pierre Gaudet, and possibly an indentured servant or two. Two of the sons and the rest of the party were left on the banks of the Shepody River to start building shelters and storehouses and to get logs ready for constructing a more substantial dwelling, while the miller of Prèe-Ronde and his other two sons returned to Port Royal on the Annapolis River to start gathering supplies and equipment to take back to Chipody.

Pierre Thibaudeau set to work very busily to gather together grain for six months, tools, two oxen, a horse, seeds, to load on his vessel. His active preparations so greatly impressed his neighbours that several proposed to join him, and Guillaume Blanchard, who also possessed a large boat, and his two eldest sons, set sail with Thibaudeau in July, 1698.

At the end of July, the expedition arrived at Chipody, where they found the campers in good spirits and enjoying their life in the woods. The Blanchards sailed on, to explore the Petiticodiac and pick out a spot for their settlement. Thibaudeau and his company worked hard during the rest of the summer and the autumn, putting up a dwelling house, a stable and a hay barn, clearing a field where wheat could be sown, burning the debris of building and of clearing the ground, and scattering ashes on the soil. They took time out from their labours for hunting and fishing, and for cultivating friendly relations with the Maliseets who came to exchange skins and game for European bread, and especially for powder and utensils. The Indians gave them valuable information about the country, and in their company the miller made more than one excursion into the woods; on one of these trips he noted a place that would be good for building a mill and carefully marked the spot.

by E. C. Wright

The British did not trust the Acadians and after offering them terms including an oath of allegiance to the British crown, there was a period of discussion and meetings to persuade them to accept it. The French refused, and because of incidents in the preceeding war as well as some open hostility toward the British, they were ordered removed from the area, by force if necessary, to be resettled in other parts of the New World. Many chose to escape into the land that would one day become New Brunswick.

The expulsion of the Acadians was a traumatic incident in the violent struggles that gripped Europe and its colonies during this period of time. It has been romaticized in poem and story, but many of those forced to leave soon returned to the Maritime area to start anew.

Those Acadians who escaped the English by fleeing to the woods started small settlements along the Northumberland and Chaleur Bay parts of what would one day be New Brunswick but they lost most of their livestock and implements. The poverty must have been appalling.

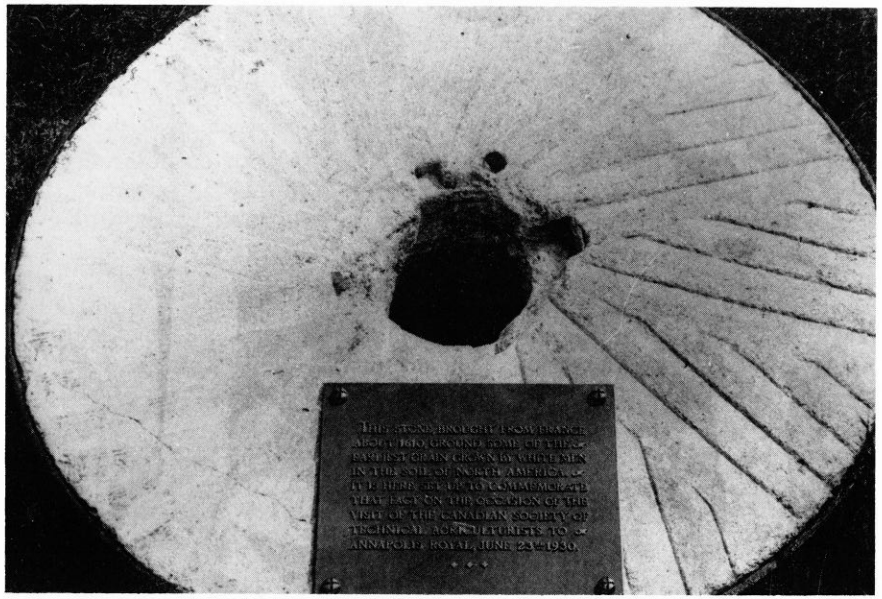
There is no truth to the stories that the British wanted their lands for settlers. In fact, it was many years before the British settlers moved onto the lands once farmed by the Acadians. Much of the dykework on the marshes had fallen into disrepair and the sea had gained possession again before the new settlers came.

The loss to the Acadia area was greater than was first apparent. Agriculture came to a stop after the initial flourish following the experiment at Port Royal. The Acadians were deserted by their government and lost contact with the homeland. New technology, seed and livestock were not forthcoming and the pursuit of farming languished as many Acadians took to the sea to fish for a living.

As early as 1690, Louis D'Amours, Sieur de Chauffours, had acquired a grant to the Jemseg area. It was this enterprising farmer-trader who ransomed John Gyles from the Indians and irked governor Villebon with his successful trading activities with the Indians.

The census of 1695 shows d'Amours with about 65 acres of land under cultivation at the time and possessing in addition to a trading post-fort, a house, barn and stable. He had 22 "horned cattle" on the farm as well as 50 pigs and 150 fowl. Wheat grew well in the area but swarms of blackbirds landed in the fields and destroyed much of the crop before it could be harvested.

Although harrassed occasionally by British privateers from the New England colonies, it appears the settlement flourished for some time.



This 1610 millstone came from France and was used at the Acadian habitation at Port Royal at grind grain. The plaque commemorates this important event in the New World.

THE ACADIAN FARMERS

By J. Lynton Martin, N.S. Museum.

The history of European-type agriculture in Canada began when Samuel de Champlain planted the first garden at Lower Granville in 1605. The following year, Sieur de Poutrincourt planted wheat, oats, rye, barley, beans, peas and garden herbs. In 1607, he built the first water-powered grist mill, and he was the first man in Canada to sow, harvest and grind wheat into flour. Poutrincourt brought the first cows to this country, along with sheep, hogs, horses and working oxen. He brought the first ploughs from France, and we suspect he may have planted the first fruit trees.

Although Poutrincourt's efforts are interesting from the standpoint of historical firsts, the Acadian story really began in 1632 when de Razilly established a settlement at LaHave. Between 1635 nd 1640, most of these settlers moved to Port Royal, and as the years passed they gradualy spread around the shores of the Bay of Fundy. These people were a hardy, self-reliant stock, and with very little help from their homeland, they soon established fine farms and lived a comfortably simple and good life. Working together, they built dykes of sods and mud around the marshlands, leaving the tops flattened to serve as roads on which they travelled to and from their fields.

Other settlements grew up at St. Anne's Point — the place to later become Fredericton. This was, incidentally, known to be some of the best interval land along the river and destined to play a big role in future developments of agriculture.

The area to become Gagetown later, also had a thriving small farming settlement of Acadians. After the 1755 expulsion from the Tantramar marshes, some of the displaced came to Gagetown but later raids by the British to enforce the expulsion order destroyed the colony.

The once flourishing farms in the Saint John River Valley, the farms of the Shepody and Petitcodiac at Memramcook, and the marshes of the Tantramar would have to wait for another war and exodus before agriculture would flourish again.

THE EXPULSION OF THE ACADIANS

"The work of removing the Acadians met with resistance at Chignecto, where the population was large and comparatively warlike. Boishebert, after being driven from the St. John, had betaken himself to Shediac, and from there he directed the movements of the Acadians of the Isthmus. When the English tried to collect the inhabitants for the purpose of removing them, they found that they had fled to the shelter of the woods, and when they attempted to follow them, they were met by the most determined resistance. On the 2nd September, Major Frye was sent with two hundred men from the garrison at Fort Cumberland to burn the villages of Shepody, Petitcodiac and Memramcook. At Shepody they burnt one hundred and eighty-one buildings, but found no inhabitants, except twenty-three women and children, whom they sent on board the vessel they had with them. They sailed up the Petitcodiac River on the following day and burnt the buildings on both sides of it for miles. At length the vessel was brought to anchor, and fifty men were sent on shore to burn the chapel and some other buildings near it, when suddenly they were attacked by three hundred French and Indians under Boishebert, and compelled to retreat with a loss of twenty-three men killed and wounded, including Dr. March, who was killed, and Lieutenant Billings, dangerously wounded. Boishebert was found to be too strong to be attacked even with the aid of the main body of troops under Major Frye, so the party had to return to Fort Cumberland, after having destroyed in all two hundred and fifty-three buildings and a large quantity of wheat and flax. Finally about eleven hundred Acadians were collected at Chignecto and shipped to the colonies to the south."

by James Hanay from his Story of the Acadians circa 1900.

The above two paintings show the effect the war between England and France had on the Acadians in 1755. The top scene along the Missaguash river shows the farmers working the fields while the bottom scene shows the homes on fire and British troops moving through the area. (From paintings by Kadler, courtesy Parks Canada).

History lives on at the Acadian Village near Caraquet as Acadian farmers use the old skills to show modern visitors how life was in the past.

A new home in rather rough condition greeted Loyalist arrivals to New Brunswick during 1783. (N.B. Archives).

"FOR KING AND COUNTRY" 1755-1860

The whole area now encompassed by the Maritime Provinces was known as Nova Scotia in 1760. The British had factual dominion over all of eastern North America and with their great sea power determined to exploit the riches of this vast tract.

In the New England colonies good land was becoming scarce. The population growth and the desire of the generations of descendants of the original settlers for their own land made it possible for Governor Charles Lawrence of Nova Scotia to entice several thousand to move from New England to his colony.

A few of these entered the St. John River and some farming began to take shape to feed the population that was now growing, particularly at the mouth of the river where the traders were doing a brisk business with fishermen, Indians and the new settlers.

By 1761, the government at Halifax recognized the advantages of the rich interval soil of the St. John Valley for agriculture and a 100,000 acre township was laid out. Two years later several hundred farmers came from Massachusetts to settle on it.

The influence of Joshua Mauger was required to keep this land for the new farmers. The government in London thought some of it should go to disbanded soldiers and sailors. He was honoured by the new settlers who named their community Maugerville for his help.

Although the land was of the finest quality, the settlers were very poor. The cattle, farm implements and even grindstones were owned in common because most of the new arrivals could not afford to purchase their own. The crops they grew were supplemented with fish from the river — particularly salmon — and game from the forest.

The rivers were the highways of the colony. In summer the small boats plied the waters to Saint John to trade and return with supplies for the settlers. In winter the ice provided a natural roadway. Only along the rivers was it possible to find interval lands that required a minimum of clearing before tillage could take place.

As with any good thing, men of vision saw the possibilities of turning a profit on this available land. Speculators quickly grabbed control of much of the best land in the lower St. John River and by 1775, this had the effect of making settlers wary. Many of the speculators saw their dreams of vast holdings — which would make handsome profits when farmed by tenants — evaporate as quickly as the morning fog that sometimes enshrouds the lower river in the autumn.

The speculators were not familiar with the "new thinking" of the New Englanders and their desire to own their own land. The class system so revered in the homeland simply did not work in the New World where independence became the rule and a man could move on to greener unoccupied pastures rather than work for someone else. It was a bitter lesson for the aristocratic English and it cost many a fortune to learn it.

The Canada Company — often called the St. John River Society — was composed of officers disbanded after the fall of Montreal to the British. Their aim was the development of the St. John River and through their petitions to the governor at Halifax, townships of 100,000 acres each were laid out and known as Sunbury, Newton, Gage, Burton and Conway.

Historian W. S. MacNutt records in his New Brunswick History that "the monopolistic character of these grants was alone sufficient to deter settlers from coming to the St. John River."

The wave of immigration expected did not occur. Many of the participants in the Company of Canada eventually left the area and those who did acquire tenants soon learned that they were not easily persuaded to pay rent or provide service to the landlord. By 1775 fewer than 3,000 people occupied the vast St. John Valley. Many of the large land grants were in danger of forfeit back to the crown because the conditions of settlement in them had not been met.

The commencement of the American Revolution was misunderstood by the British and their responses to it led ultimately to the loss of their first empire in the New World. Although Nova Scotia did not become involved in the war as such, there were sympathetic leanings, especially at Maugerville and an armed insurrection was led by a New Englander in the Chignecto area.

Like most civil wars, the divisions were sharp and often split families. Some of the aristocratic landowners had developed great wealth in the new colonies and sided with the British to preserve a social order they had imported from the Old World. Armies were raised in the colonies by the homeland and the name "Loyalist" first came into use as a political term defining those who wished to remain under the protection of the British crown.

During this turbulent period some settlers arrived in New Brunswick from the rebelling colonies and began making a new home for themselves. Some exiled Acadians had returned as well. To complicate this mix, French-speaking settlers from Quebec, different in dialect and custom from the Acadians, had entered the northern part of the province, especially around the Restigouche.

There is scant material available on agriculture from this period although it is possible to speculate on the few references made. Maugerville apparently had a fairly large stock of cattle "which grew fat on the excellent grass" and some grain was shipped to the traders at Saint John.

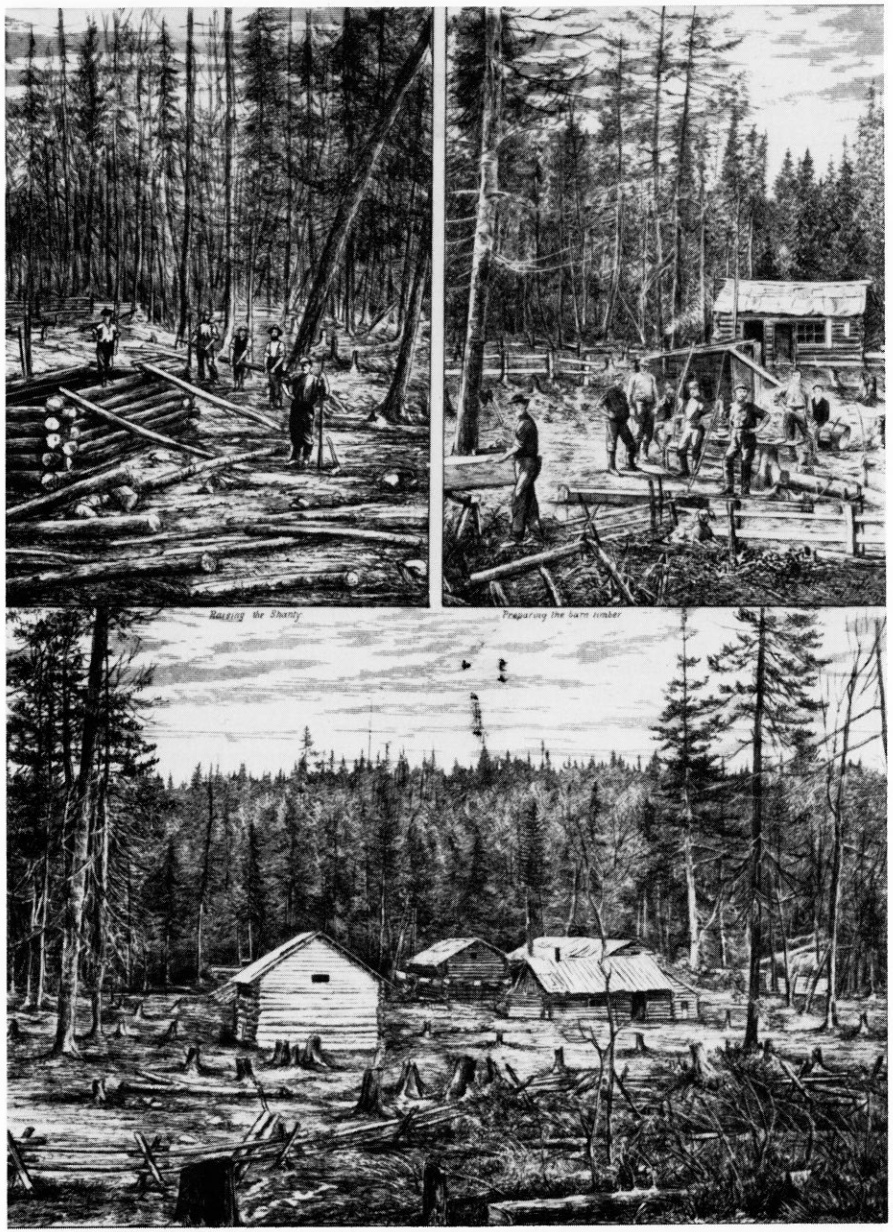
THE MAUGERVILLE INTERVALE.

"Opposite to Oromocto River, upon the northerly side of the River St. John, is the English settlement of disbanded soldiers from New England, consisting of about eighty families who have made great improvements and are likely to make an established settlement there, and by some trials they have made of hemp upon the intervale it succeeded beyond their expectation.

I measured hemp myself that was nine feet high, that had not come to its full growth in the latter end of July. They generally have about 20 bushels of maize and about 20 bushels of wheat from an acre of land, that was only cleared of its woods and harrowed without even having a plow in it. When I was on the river last year, I saw myself, eighty bushels of Indian corn raised from one acre of land that had been ploughed and properly managed. I would observe that the corn raised on this river is not the same kind as the corn in New England; neither the climate or soil would be suitable to it.

They get their seed from Canada and they sow it in rows about three feet distant as we do peas in our gardens; it takes about a bushel to sow an acre. The ears grow close to the ground as thick as they can stick, one by another, pointing outwards like a chevaux de frise upon each side of the rows. The richness of the soil, the manner of sowing it and of its growing, many account very easily for its producing so much to the acre. Some of the old French inhabitants of the river have informed me that they have raised in a seasonable year, near one hundred bushels of Indian corn per acre."

From the letter of Surveyor-General Charles Morris dated Jan. 25, 1768 quoted in the book "Early Agriculture in Atlantic Canada" by Howard Trueman, 1907.



Three views of clearing the forest and building a settlement. Before crops could beplanted, the trees had to be cut but the stumps were often left for a few years to rot. Crops were sown among the stumps. (N.B. Archives).

The war in the colonies produced a market for the farmers and good prices for cattle to feed the army the British had to maintain for defence of Nova Scotia.

The humiliating defeat of the British by the rag-tag armies of the colonies put a new complexion on the future of Nova Scotia, as the whole Maritime area was called. At New York, under Sir Guy Carleton, were thousands who wanted to remain loyal to the British sovereign or could not return to their former holdings because of the bitter feelings in the colonies over the struggle just ending. It was necessary to remove these people to British soil for their own safety.

Many of the Loyalists had served the British faithfully during the insurrection. Their homes had been burned and goods confiscated by the "Yankees" and, although the peace treaty made by the new Congress of the United States of America promised to return the property, the states would not accept this decision.

Beginning in the spring of 1783 a new wave — a "human tide" as one writer put it — would hit the Maritimes. In the Bay of Fundy, particularly the St. John River Valley area, this "human tide" would see 10,000 new settlers. This population explosion more than doubled the number of residents in the still unfounded New Brunswick, and brought a vast social and economic change.

Complicating Carleton's problem of moving a vast number — over 35,000 people — to the new land was the fact that an army had been raised on the American soil and these soldiers were careful to point out the distinction between themselves and the other evacuees who had been displaced because of their services to the British. Through consideration for service during the war, the "provincial army", as it was called, was absorbed into the regular British army, thus making the officers eligible for half-pay on the disbanding of their regiments.

And the Loyalists had other demands — demands perhaps bred from the wave of self-government that cost them their homes — that they too would have their own province. The germ was incubating that would split the vast province of Nova Scotia and create New Brunswick by June of 1784.

Although the land was available, other considerations had to be undertaken. The British wanted the former soldiers settled in areas to defend the region against the threats from the new American nation. A land route to the British possessions in Upper Canada was also a priority. The decision was made to settle the disbanded soldiers along the St. John River where farms could be cleared from the wilderness and communities established.

THE DIARY OF SARAH FROST 1783.

Saturday, June 28. — Got up in the morning and found ourselves nigh to land on each side. It was up the river St. John's. At half after nine our captain fired a gun for a pilot; an hour later a pilot came on board, and at a quarter after one our ship anchored off against Fort Howe in St. John's River. Our people went on shore and brought on board spruce and gooseberries, and grass and pea vines with the blossoms on them, all of which grow wild here. They say this is to be our city. Our land is five and twenty miles up the river. We are to have here only a building place of forty feet in the front and a hundred feet back. Mr. Frost has now gone on shore in his whale boat to see how the place looks, and he says he will soon come back and take me on shore. I long to set my feet once more on land. He soon came on board again and brought a fine salmon.

Sunday, June 29 . — This morning it looks very pleasant on the shore. I am just going ashore with my children to see how I like it. Later — It is now afternoon and I have been ashore. It is. I think, the roughest land I ever saw. It beats Short Rocks, indeed, I think, that is nothing in comparison; but this is to be the city, they say! We are to settle here, but are to have our land sixty miles farther up the river. We are all ordered to land to-morrow, and not a shelter to go under.

From the Walter Bates book "The Loyalists of the Spring Fleet".

This establishment of the provincial army by platoons and regiments along the St. John River formed the basis on which many of the communities, still existing in the province of New Brunswick, developed. Although as much good, cleared land as possible was used, it was still necessary for many to hack farmsteads out of the forest.

In October of 1783 the weather turned the foulest possible with cold and wet conditions prevalent. For lack of axes, hatchets were issued the men to build shelters for themselves and their families before the approaching winter. Tents covered with boughs were the first homes for some. Provisions promised were in scarce supply.

At the mouth of the St. John, a city was being carved around the old fortifications and trading posts of the past. Saint John would remain the focal point of entry to the vast valley for years to come and would play an important role in the development of trade and commerce.

Although the Loyalists numbered among them professionals such as doctors, judges and teachers, for the most part they were tradesmen and farmers. Indeed, even the most aristocratic and, at one time, wealthy of the group had some experience in farming because agriculture was a support for a way of life and not often the sole means of livelihood.

There was a great deal of mistrust. Those who had been deposed from high office and a life of ease in the United States expected favourable treatment from the Crown for their past services. They wanted positions of prestige and power similar to what they had held. It is interesting that popular opinion in England favoured the establishment of a class society in New Brunswick with large landholders and their tenants happy and contented!

Much has been written about the Loyalists. Their tribulations have been documented and many of those who came here were discouraged by the harsh reality of a frontier existence. Some moved quickly on to England or, after the firebrands of patriotism died out in the United States, returned there.

The would-be farmers were given free tools and provisions necessary to sustain them on the land for three years, until they could start producing. Many of the officers were on half-pay or pensions from the British crown. A compensation board was also set up to consider claims of those who lost everything in the war, and there were numerous payments made in addition to the free grants of land.

Sir Thomas Carleton, first Governor of New Brunswick.

At last, the Province of New Brunswick, born in June, 1784, seemed on the verge of moving forward. The prospects were good for trade was increasing and there were markets for the crops. Agriculture could begin in earnest and should flourish, according to writers of the period. But the problems would not go away!

By November of that same year the cheering of a new government and province turned to bitter trials for the leaders as reports of near starvation came from outlying settlements and emergency measures were required to get supplies available to the people. Quarrels were developing over the partition of Nova Scotia, and of particular concern was the rich marshland of Tantramar where so many cattle had been raised. There were also challenges from the United States over the new province's western boundary.

There were numerous problems with land grants. Hasty surveys often led to quarrels among neighbours. The right of the crown to the best timber for ship spars and masts led to other complications. Against this backdrop, agriculture was beginning, as one observer wrote, to find a foothold.

A scarcity of labour meant that an individual family could manage only a small acreage with success. Tenant farming was not acceptable to the Loyalist arrivals and help was very difficult to get. Many an aristocrat expended a fortune clearing vast tracts of land only to find it laid unused and reverting again to bushes for want of the manpower to plow and plant it.

A traveller through the area, near what is now Fredericton, found "gentlemen" working at burning bush and clearing land as well as "planting potatoes and other vegetables". Dairy cattle were imported from the United States and horses were becoming more plentiful, although oxen were still regarded as the principal means to pull the plough.

Many of the small communities that sprang up with the Loyalist arrival became highly self-sufficient in food production with grist mills and other small businesses but there was no agricultural commodity that could be exported for the badly needed cash the settlers required for expansion. It was still necessary for the military garrisons at Saint John and Fredericton to import food for the troops.

EARLY LOYALIST LIFE

The historian of the White family gives a charming picture of the first house and the early years in New Brunswick of William and Deborah Tilton-White:

The first house they built was made of logs notched together at the corners and chinked with wood and moss, the fire-place being after the Dutch fashion, with little or no jambs, and so constructed that a sled-length stick could be laid on the fire. Probably the fire-place plan was an imitation of those in the homes of many Dutch settlers in New Jersey. They went to work with a will and determination to make the best of their new home, and soon had a more modern house, where many a traveller found a welcome resting place.

Mrs. White often laid her babe away in some quiet spot and worked in the field side by side with her husband, doing her housework in the evenings. In the winter, she sometimes travelled across Grand Lake, five miles, on snowshoes, drawing grain loaded on a toboggan, which, after grinding in a hand-mill, she would take back to her home, quite satisfied, although the flour was doubtless not equal to Ogilvie's best.

The grist mills of that time were crude affairs, consisting of an upper and a lower stone, each similar to an ordinary grindstone of about thirty inches in diameter. By turning a crank the upper stone was made to revolve, and crush between the "upper and the nether millstone" the grain which was introduced through a hole in the centre of the upper stone.

From the White Family History written in 1906. (N.B. Museum).

In the counties of Kings, Queens and Sunbury agricultural progress was being made. The records show that vegetables, grain, corn and potatoes were common and often bartered in local trade for the other staple supplies required. By 1804 wheat was being cultivated in enough quantity in Kings County to supply the local population and to permit several hundred barrels to be sold annually. There was the beginning of an orchard industry developing around Gagetown and Fredericton.

Although some local trade had developed for dairy products in the growing communities, most residents kept a cow or two for milk and butter, hens, some pigs for winter meat, and sheep to supply the wool needed for weaving and knitting.

The fortunes of New Brunswick took a decided turn for the better in the first decade of the nineteenth century when the Americans cut trade relations with Britain and France in an effort to promote self sufficiency at home.

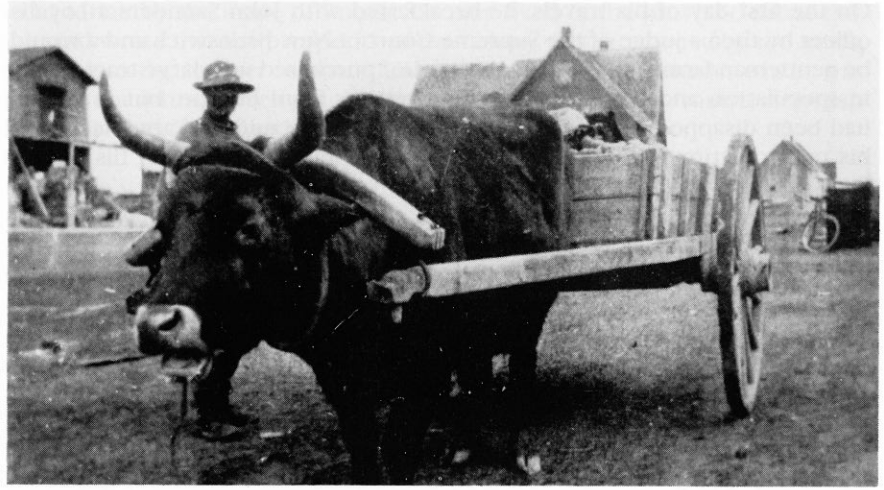
This renewed interest in commerce and the flow of money helped build a shipping industry in the new province and provide an outlet for its goods. The Napoleonic War raging in Europe meant this little far-off part of the British Empire would feel the effect of the commercial boom in the demand for supplies, particularly lumber for warships.

In 1807, the British government passed a Free Ports Act to allow American shipping to trade in the Maritimes, and Saint John had this status. By being the middlemen in transactions between American interests and the British, New Brunswick merchants prospered handsomely. Flour was $3 a barrel on the American side but would bring $12 on the British trade. In spite of their government's best intentions American smugglers circumvented their country's laws to the profit of New Brunswick merchants.

The building of ships in New Brunswick brought a wave of immigration of skilled tradesmen and new markets opened for the production of the land. Agriculture was still some time away from flowering but steady progress was being noted. A further setback to it was on the horizon as that other great provincial natural resource, the forest, moved to centre stage.

The wars in Europe closed the vast Baltic to the British. They needed timber to construct their ships of war and for other building purposes. The search was to the west and New Brunswick entered a new era. The large pine trees in the provincial forest and the many rivers enhanced the opportunities.

This vastly improved commercial trade in lumber was to the detriment of agriculture. Many a farmer took to the forest for the ready cash and neglected his farm, working it in summer for his own provisions but regarding it as a necessary interruption to the business of lumbering.



Oxen were the beasts of burden until horses were bred for heavier work. (N.B. Archives).

We are indebted to the journal kept by Lt. Col. Joseph Gubbins during his tenure in New Brunswick. From 1811 to 1813 he toured militia units in the province in his role as inspector. A keen observer, he saw the effect of the lucrative lumber trade on agriculture.

Writing on July 3, 1811, while journeying by canoe from Fredericton to Woodstock, he commented on the passing shorelines:

> "Considerable improvements have been made on each side of the river, every turn of which presents the richest views. The country would, and indeed does, afford the necessities of life and many luxuries where the least industry has been employed in cultivation, but the trading in timber has had a baneful effect. The labouring class devote much of their time to this lucatrive employment, which would be better bestowed on their farms."

The Gubbins journals found their way to England and only came to light in 1971 when Howard Temperley obtained the original copybook from a descendant of the late Colonel. A history professor, Dr. Temperley had spent some time lecturing at the University of New Brunswick and the editing of the little book provided another relevant document to the understanding of the beginnings of our province. It was printed in 1980 by the Kings Landing Corporation as a New Brunswick Heritage Publication.

Gubbins' travels and comments show he deplored the breakdown of British tradition in the new province and he offered sharp criticism on the state of the militia he saw here.

On the first day of his travels, he breakfasted with John Saunders a Loyalist officer by then a judge of the Supreme Court of New Brunswick and a would-be gentleman farmer who, Gubbins wrote, "purchased up a large tract of land in speculation and in hopes of getting settlers from Europe, but in that he had been disappointed and his house stands in the midst of a wilderness of his own creation, without a neighbour or a practical road and his cleared lands are growing up into forest."

Saunders had tried to recreate the estate he left in Virginia. "The Barony", as he called it at Prince William, failed.

By July 12, the Colonel was at Sussex Vale and visited with Colonel Leonard. He found the settlement "pretty" but noted that Leonard had expended eight thousand pounds to clear his estate which now had a value of less than three thousand pounds on the depressed land market.

Gubbins' journey took him to the home of Hon. Amos Botsford, speaker of the N.B. Legislature, on July 17 and he had a view of the Tantramar marsh. The 800 acres of land "well secured by strong dykes from the sea" were being farmed but he found "the mosquitoes were here more troublesome than I had ever found them to be in any other part of the world."

Gubbins saw Acadian settlers in the Westmorland County area, and remarked that they often moved a barn when manure built up rather than use the manure on their fields, which were in need of it. That custom was reported by other writers who observed in Gloucester County that manure was left to waste.

Fortunately for later readers, the good officer digressed from writing on purely military matters to give some sketches of life in the province at the time.

"The great severity and length of the winter, together with the high price of labour, enhance much the price of provisions," he wrote. "In New Brunswick (the cheapest part of British North America) a citizen lives at full as great an expense as a person in the same line of life would in a country town at home. Fuel is particularly dear. Though the forest may be said to be at the door, yet wood at St. John is at present two pounds a cord, of which a small family may well consume forty in the course of the year. I have mine on the estate I hire, but two men are steadily employed at hewing, drawing, sawing and splitting it for use for six months annually."

During his 1813 travels up the Northumberland coast, Gubbins does not give many details on the agriculture pursued there, but he did write that at Shediac he could not purchase hay or oats for his horse. In Richibucto he remarked on a variety of diseases and insects that attacked the crops and also the problems with poultry which fell prey to foxes and weasels.

Although the great timber boom had depleted the agricultural workforce and reduced the struggling industry in stature, it was still essential. The prime means of moving the timber from the forest to the rivers were the horses and oxen — both requiring hay and grain to keep working.

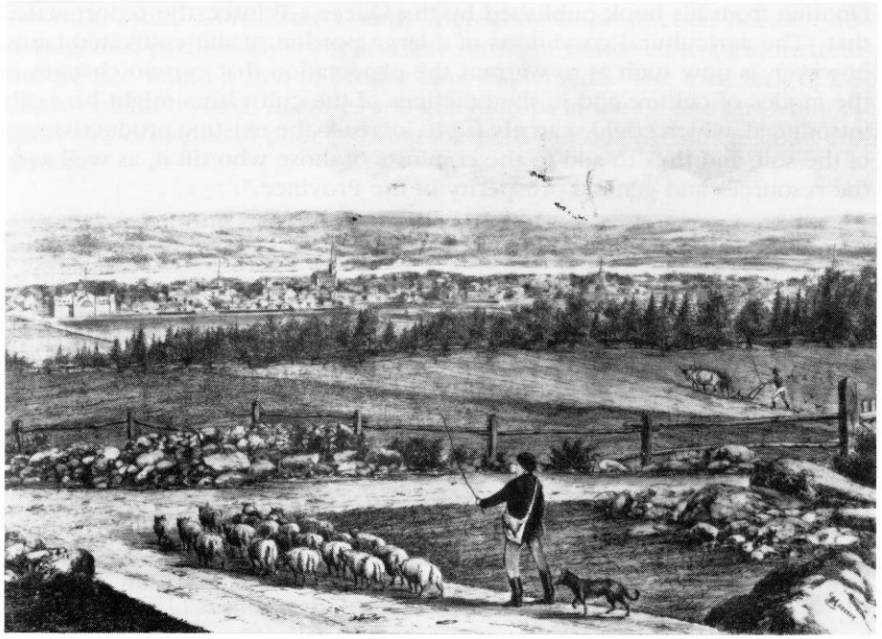
This hay economy played an important role in the provincial agricultural history for many years. It did not decline until after the invention of the tractor and mechanization. Even in the late 1920's, hay was still the major crop from the marsh areas and brought good prices as far away as Bermuda.

THE GUBBINS JOURNAL.

Friday, 19th July *(1811)*

I returned by the road I came to Tritz's. A considerable tract of land which was covered by fallen trees when I descended had undergone the second process of clearing, namely, the trees that had been cut off about 2½ feet from the ground had been set fire to, which in weather proper for the work runs over the surface with rapidity and consumes the small branches and brushwood. But this part of the business requires the utmost attention, for in very dry weather, should the flames spread to the forest, it sometimes does great mischief, destroying the fuel as well as the fences and farm houses. There are many extensive districts that have been laid waste by similar accidents. The heavy timber is then cut into manageable lengths, which are either retained for building, fire-wood, or rails for fences, or are heaped together to be burnt in piles. This is an undertaking of infinite labour where the trees are large, which is always the case on the best soil, and cleared land may be purchased for half the expense of making it so. The stumps and roots still cover and disfigure the ground and prevent a plough being used with effect for many years afterwards. New land of this description is very productive. Where it is not absolutely wanted for other purposes, it is generally sown with English grass seeds and used for meadow or pasture, after a couple of crops have been taken from it. Wheat or turnips are not liable to suffer from the fly when sown on new land. These insects often destroy whole crops; that which attacks wheat breeds in the stem and occasions it to fall down before it comes to maturity. It is called the Hessian fly. Before the arrival of the Hessian troops, during the Revolutionary War, this fly is said to have been unknown. Another method of clearing land is also practised with far less labour, but less immediate profit. The trees are killed by taking off a large ring of the bark and are left in that way to fall off themselves; in the meantime as they produce no leaves some cultivation may be carried on under them. The forest trees that are sometimes left to ornament the cleared ground commonly die for want of shelter, or are thrown down by the winds.

From the Heritage series book published in 1980 by Kings Landing Corporation.



An early view of Fredericton showing fields and pasture where homes and businesses now stand. (N.B. Archives).

By 1820 the importation of food into New Brunswick was the rule rather than the exception. Everything hinged on the timber trade and although conservative-minded people warned of the dangers of the single source economy, the good times seemed endless.

The shipbuilding industry boomed at Saint John and other towns along the coast. Even the fishing industry was neglected as the men went to the woods. The bubble expanded to the point where it had to burst. 1826 saw it happen! Ships and timber cargoes in England were worth nothing. Many a merchant living in princely style lost everything in the fiasco that followed. It was back to the farm for many New Brunswickers of the day.

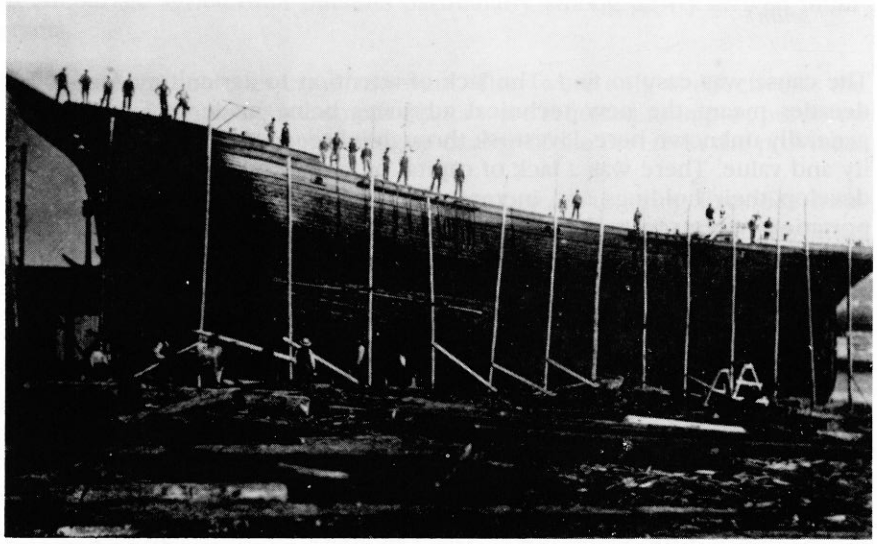
Although pockets of agriculture had begun to thrive — Kings County around Sussex was a good example — in many areas the neglect of the farms and their actual abandonment in the great rush to the forest meant a virtual new beginning had to be made. Although a trickle of settlers came to New Brunswick before 1830, most of the new arrivals found an indifferent attitude on the part of the government to agriculture and a good number left for other areas to begin farming.

An historian by the name of Robert Cooney lived in the province about this time and wrote that the prosperity of the colony was threatened by too much attention to the lumber industry and not enough to agriculture, which was the basis for future development. His advice was to "lumber moderately, fish vigorously and farm steadily".

His advice was added to that of other concerned citizens who saw their way of life changed by the easier money of the forest. Their protestations fell of deaf ears at the governing level because the profits of the merchants and timber barons were immediate, not some long-term dream. The legislators of the day were not sympathetic to any tariffs on imported foodstuffs to protect the struggling agriculture industry in the province. In fact, they opposed any type of protectionism because profits could be made importing the food as well as freeing more labour for the lumber business.

In spite of this official unconcern, agriculture was gaining a toehold on the Miramichi, the eastern counties of the province and in the Upper St. John River Valley. There were markets in the lumber camps for the foodstuffs produced. Hay and grain for the numerous animals used in the woods operations were in good demand.

As late as 1850, New Brunswick was still importing food at a major cost to the resources of the province.



Construction of wooden ships to haul timber to England provided many jobs along the coastal waters of New Brunswick until steel replaced the traditional construction methods. (N.B. Archives).

Oxen played the major role as the heavy beasts of burden on the farms and in the forest until the middle of the nineteenth century when improved breeds of horses became available. (Courtesy of the Webster Collection, N.B. Museum).

The cause was easy to find. The lack of attention to agriculture for several decades meant the new technical advances being made in Europe were generally unknown here. Livestock through inbreeding had declined in quality and value. There was a lack of capital or credit to permit the farmers to develop their holdings and increase their production. Rudimentary transportation systems were the order of the day with the rivers still the highways, and what roads existed, in poor repair.

The attitude of the legislators was changing during the 1840's. They saw only too well the problems that developed with a "boom and a bust" and wanted to encourage agricultural production to cut the cost of importing food.

By 1850 they petitioned the Lieutenant Governor to invite the eminent British scientist and agricultural specialist Professor James F.W. Johnston to examine the province and assess its agricultural potential. His report, received by the Legislature in 1851, caused a minor sensation and flurry of speculation.

Professor Johnston found room for optimism in New Brunswick during his extensive travels and from the information he received from many of the leaders in the industry of the day.

Quoting from his book published by the Queen's Printer, the report stated that "The agricultural conditions of a large portion of the cultivated lands, however, is now such as to warrant the expectation that certain changes in the modes of culture and in the practices of the cultivators might be easily introduced, which could scarcely fail to increase the existing productiveness of the soil, and thus to add to the comforts of those who till it, as well as to the resources and general prosperity of the Province."

USING FISH FOR FERTILIZER

The decline of the cod fishery in the upper part of the Bay is attributed to the wanton destruction of the proper and natural food of the cod — herring and capelin — which are taken in immense quantities; not for immediate eating, or for curing, or for bait — but for manuring the land!

In a representation made to the Canadian legislature by a fisherman of Gaspe, it is stated, that this fisherman has seen five hundred barrels of capelin taken in one tide, expressly for manure; and that he has also seen one thousand barrels of herrings caught at one time, and not taken away, but left to rot upon the beach!

It has been remarked in the Bay of Chaleur, that owing to this waste of the smaller fish, the cod fishery recedes, as agriculture advances. The lazy farmer, who thinks he can increase the fertility of his land by a single sweep of his seine, does so at the expense of the fisheries, although a bountiful Providence has furnished the shore with inexhaustible quantities of kelp, seaweed, and other valuable manures, which really enrich the soil, while it is admitted that the use of fish greatly deteriorates it.

The Legislature of Canada has been strongly urged to make it a misdemeanor, punishable by fine and imprisonment, for any person to use either herring or capelin as manure; and such a measure would sem to be highly desirable in New Brunswick. To be effective, there should be similar regulations on both sides of the Bay of Chaleur.

Lobsters are found everywhere on the coast, and in the Bay of Chaleur, in such extraordinary numbers, that they are used by thousands to manure the land. At Shippagan and Caraquet, carts are sometimes driven down to the beaches at low water, and readily filled with lobsters left in the shallow pools by the recession of the tide. Every potato field near the places mentioned, is strewn with lobster shells, each potato hill being furnished with two, and perhaps three, lobsters.

From the report of M. H. Perley, Emigration Officer at Saint John to the Legislature in 1851. (N.B. Legislative Library).

Johnston found Gloucester County increasing in production because new immigrants, particularly from Scotland, brought better cultivation methods, but he also found a lack of proper farm implements. The total lack of land improvement through manures and green crops in the Gagetown-Oromocto areas and evidence of poor plowing methods did not encourage good crop growth.

Although admitting that the winter was longer in New Brunswick than in England he found he could "fairly conclude that there is nothing in the length of the winter which ought — where time is diligently employed, and its value is known — seriously to interfere with the progress of out-door operations, or materially to add to the expense of arable cultivation."

He deplored the practice of haying the same land year after year and said that that would exhaust the land. Manure, he said, had to be added to the land regularly and it must be plowed and renewed to produce better crops.

The professor advocated giving cattle turnips as well as hay during the winter months as a means of better utilizing the production of the land. The winter would be injurious to livestock, if not properly housed and better care of the cattle would result in their increased value to the farmer.

Professor Johnston came away from his tour of New Brunswick with an interesting slant on the lumber industry which many before his time had deplored as having a damaging effect on agriculture.

He said the lumber trade had helped the province by making a market for agricultural products available and helped keep the prices up higher than in neighbouring areas. The "good wages" it paid to the woodsworkers who, for the most part were also small farmers, had helped develop the farms as well.

There had been "much evil" incurred by the lumber trade as well, he wrote, since it had encouraged able-bodied men to seek the highly paid work instead of farming and had distracted young men from an otherwise farming occupation.

The sale of hay to woods operations had left the farms with little for their own livestock and this, he said, was injurious and reduced the amount of work the farmer could get from his horses or oxen the next spring.

The loggers paid scant attention to the land they cut and Johnston pointedly refers to the fact that it was harder to clear for agriculture after logging than before.

The professor found that there was not a lack of markets for farm production in New Brunswick at the time, since the demand could not be met in wheat, oats and other grains. Salt beef and pork were also being imported since enough was not produced to meet the growing population. In the case of red meats, he found that the quality of those produced here were somewhat inferior, and that the livestock should be improved by the importation of better stock.

Among the recommendations for government consideration were those for drainage of wet lands, swamps and marshes, a land register for each area so immigrants could find farms easily, and agricultural education at all levels in the schools and colleges.

He wanted an agricultural demonstration farm, district corn and cattle markets, a tax on granted but undeveloped land so a fund for improving existing farmland could be raised, the establishment of a central agricultural society for the province, new roads to open up land and facilitate the movement of produce to markets, better land surveys and registration systems, the formation of agricultural libraries for farmers, the employment of a provincial agriculturalist to visit societies and carry out practical training among the farmers and an analysis of the limestone potential in the province as well as the coal and iron reserves. His report is still interesting to read.

This rising concern for a stable agricultural industry in New Brunswick came from many quarters. An Agricultural Society had been founded in Saint John in 1790 and another in Charlotte County in 1819. Both of these attempted to encourage agricultural pursuits particularly among newly arrived immigrants.

But these local societies came and went. They were only as effective as the men leading them and government grants were required to import purebred livestock from England to enhance the quality of the breeds in the province.

Incidentally, New Brunswick was the first colony to bring livestock from England and Howard Trueman tells us in his delightful little book, published in 1907, that all of the animals imported were registered in the first volume of the English Herd Book.

Trueman, a farmer all his life, lived at Point de Butte overlooking the Tantramar Marsh. He did extensive research into the agricultural developments of the Maritimes after his retirement, and we are indebted to him for the record he left. He stated that by 1850 few young men were willing to stake their future on farming and the industry was in a state of decline.

A new organization founded by leading citizens and government officials appeared on the scene in 1850. This "New Brunswick Society for the encouragement of Agriculture, Home Manufactures and Commerce" had lofty aims but, with a government grant not to exceed 200 pounds annually, could do little.

FARMING IN THE NORTHEAST

Harvesting was done by reaping hooks or sickles as they are sometimes called. The type of sickle used here was smaller and narrower than the ones used in Upper Canada. The farmer grasped the grain just below theheads with one hand while with the reaping hook in his other he slashed the stems through, leaving the grain on the ground to be picked up later. The grain was gathered and put into sheaves; a handful of stems was tied around the sheaf to hold it together, these sheaves were then gathered and stored in the barn.

Threshing was done with a flail; this instrument was constructed of two pieces of wood, a short piece and a long piece connected at the ends with a strip of leather about six inches long. The long piece of wood was held in one hand while the other was swung from over the shoulder so that it hit the bundles on the floor knocking the kernels off the stems. To separate the grain from the straw a windy day was chosen. A blanket was laid on the ground with two corners fixed to the ground, the other two corners were held up as the grain was poured onto the blanket. The wind would blow away the straw, and the grain would fall to the floor or into a box.

The flail was replaced by the threshing mills which were used in this area as early as 1840. Threshing mills were simply a revolving drum with short flails attached to it. The loose sheaves were fed onto a moving belt that took the grain under the revolving drum, this way the grain was threshed. Power for these threshing mills was supplied by a horse treadmill. This was a box like affair about eight feet long and three feet high with three sides enclosed. A horse was led into this box and a bar fastened behind the horse so he could not get out. The floor sloped upwards and had cleats across it for the horse to get a toe hold. When the brake was taken off, the weight of the horse started the threadmill going and the horse had to keep walking. The whole thing ran like an escalator, horses were changed every two hours. Frank and Henry Good jointly owned a threshing mill, first driven by the treadmill then by a water cooled engine. They did customer threshing around 1900 travelling about the country from Stonehaven to the Miramichi.

From the book "Pioneer Settlements of the Bay of Chaleur" by Margaret Hunter, 1978.

According to Trueman, it did organize a provincial exhibition in 1852 which was a success but by 1855 it had passed from the scene. The display of provincially produced goods and agricultural commodities was well received and a credit to the farmers and craftsmen.

Judge Lemuel Wilmot delivered the lecture at the great exhibition at Fredericton and apparently was carried away with the grandeur of the occasion or his vast love of the province he had helped nurture for many years.

"Is it any marvel that the world is ignorant of the resources of our country, when there are so many who are ignorant among ourselves?" he asked. "One good result of the New Brunswick Society will be to make us justly known abroad. And it is high time the ignorance of our character and the character of our country was dispelled."

Apparently, New Brunswick was as self-effacing in those days as we often are today for the good Judge referred to New Brunswick's entry at the great exhibition in London a year or so previously as consisting of "a lump of asphaltum, the figure of an Indian and a bark canoe."

The decade opening the last half of the nineteenth century would prove the turning point for agriculture in New Brunswick. There would be no dramatic overnight change but order would emerge from the chaotic conditions of the past and leaders in the agricultural sector would emerge to provide the directions needed.

Dr. James Robb, an outstanding proponement of farming and of education for farmers, called for the formation of farmers' clubs throughout the province as a means of providing practical knowledge to the workers of the soil.

Dr. Robb served in several capacities on the N.B. Agricultural Society formed in 1850 and chaired a commission set up by the Legislature in 1856 to assess the need for improvements to agricultural societies in the province and the policy of making government grants to them.

A questionnaire circulated by this commission asked the farmers to consider the need for a central board to govern agriculture, a model farm, more education on agriculture in public schools, and a superintendant of agriculture for the province.

The report drew heavily on the findings of Professor Johnston. The government was presented a document in 1857 on the findings of the Commission that can be viewed now as the first step toward the eventual founding of a Department of Agriculture.

The legislators accepted the recommendation calling for the establishment of a Board of Agriculture with responsibility for several activities, including the holding, every three years, of an exhibition in the province. The model farm recommendation was, however, left for discussion at a later time.

Attention has lately been directed to the capabilities of New Brunswick as an apple growing country. Until of late years no special attention has been given by our farmers to the raising of apples and other hardy fruits. The orchard one sees in country districts show but little care or cultivation. The trees are of a poor, scrubby description, bearing fruit of very indifferent quality. At awakening, however, has now taken place, and at a recent exhibition held in this city, apples of a high grade were shown. It is interesting, however, to note thatin old times, New Brunswick produced apples of excellent quality, grown under the scientific cultivation of a practical orchardist, proof of which is shown by the following extracts from the paper of September 24th, 1847. The advertisement of William Greenslade, and editorial comment on the result of his efforts in the cultivation of apples will afford an idea of what intelligent care and attention was capable of doing at that time in the Province, in this pursuit: "Agriculture. The subscriber respectfully informs the agriculturists and horticulturists of the Province of New Brunswick that he has for sale a quantity of very superior grafted apple trees at the low price of one shilling each, by the quarter hundred; also others, not grafted, at eight shillings and four pence per hundred, and some as low as five shillings per hundred. Having resided in this province twenty-five years he flatters himself that he has acquired such a practical knowledge of its soil and climate, and of the mode of cultivation most suitable thereto as will enable him to show fruit and fruit trees unequalled by any in New Brunswick, and having (etc.) he flatters himself that he has acquired such a practical knowledge of its soil and climate, and of the mode of cultivation most suitable thereto as will enable him to show fruit and fruit trees unequalled by any in New Brunswick, and having also been regularly bred to agricultural pursuits, he adopts such a method of managing orchards and fruit trees in general, as has not before been introduced into this country, and such as ensures a superior and plentiful produce.

WILLIAM GREENSLADE,
Springfield, Kings County, N.B., Sept., 1847.

REPORT
OF THE SUNBURY AGRICULTURAL SOCIETY FOR 1844.

In coming before the Society with our third Annual Report, we still find reason to complain of a want of a more general interest and support from the whole County, and we necessarily feel the want of a great market town, like Fredericton or Saint John for our Shire Town, where independence and numerical influence would not fail to give effect to our exertions.

We are again under renewed obligations to render our grateful thanks to the Almighty for another fruitful season and remarkably fine weather for securing the Hay and Grain crops, which have never been more abundant or better secured.

How far our Society's efforts have been instrumental in producing an abundance we submit to those to decide who have most carefully investigated the subject.

Considering the very great depression in the farmers' markets of Fredericton and Saint John, it is rather a matter of surprise that so great a surplus is produced to be slighted by such ungrateful consumers.

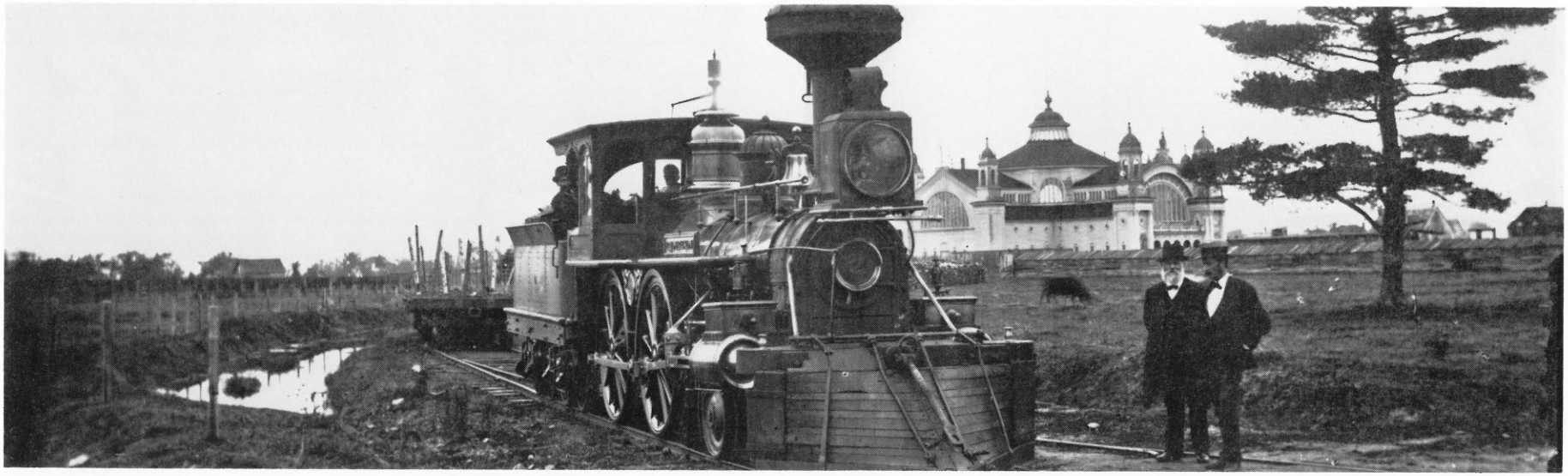
The price of fresh meat in our market bears no proportion to that of other provisions as compared with other countries, and the misguided policy of our traders in giving a preference to foreign produce should induce our farmers to barrel their Beef and Pork rather than send it fresh to market, and thereby prevent such large importations from the United States.

A small experiment has this season been made in raising Broom Corn, which although failing in part in consequence of an attack of grub-worms, and also the badness of the seed, yet has proved that it is not more difficult to raise it than other corn; and since the brooms are well manufactured in this Province, it will be as imprudent to import American Brooms in future as it has been to import Hay from New York, because they had a peculiar method of screwing it into very nice bundles.

The experiment of sowing wheat on very poor land, and covering it with straw has also been repeated this season, and as far as we have learned with good effect.

Our articles of domestic manufacture are of a respectable description, and our implements of husbandry are such as to render manual labor very light in comparison with that of former years.

The Nineteenth Century agriculture along the St. John River lives on in the recreation of Kings Landing.



(N.B. Archives).

OUR SHOW AT FREDERICTON.

Anticipating that the Provincial Board would recommend to the Legislature the necessity of each county having a permanent show-ground, with the necessary buildings to accommodate their annual shows, they were instructed by the society, at the last annual meeting, to locate a show-ground and track, during the year 1860. In May, they leased from the Hon. John S. Saunders, 53 acres of suitable land, immediately in rear of the city of Fredericton, (142 rods by 60 rods,) for 21 years, at $80 per year, for the first two years, and $200 per year afterwards. The land is worth this rent for grazing purposes. Should the society at any future time wish to keep or hire any valuable stallion, bull, ram, &c., here they have the place for them to stand, and the pastures to accommodate the farmers' stock selected to be served, at such a rate as barely to pay expenses.

On the end next the city they enclosed a show-yard, 12 rods by 60 rods, fenced with a substantial board-fence, 8 feet high; and immediately inside said fence, on three sides, are covered stalls for horses and cattle, and pens for sheep and pigs. The fourth side, next poor-house road, is occupied for the entrance in the centre, with an office on one side and refreshment-rooms on the other. The centre of the yard is occupied by two buildings: one, 60 feet by 80 feet, to accommodate the farm-produce and manufacture hall; and another, 50 feet by 80 feet, nearly all glass, arranged, on one side, to accommodate the horticultural show, on the other, domestic manufactures produce and miscellaneous articles. Between these buildings, is a large ring, bedded with sawdust, 150 feet in diameter, with a flagstaff in the centre. Near this ring, are eight box-stalls for stallions, with doors, and a well to furnish the stock with water. These arrangements are nearly complete, and would not only have been completed, but the whole grounds would have been enclosed and track graded, the past year, had not a majority of the County Council receded from their compact entered into with the society in January last; but it is expected that the coming year will overcome all these obstacles, and, with the assistance solicited through the Provincial Board, they will be able to complete this great undertaking, which will afford the rest of the Province proof of the necessity of having permanent show-grounds and buildings.

On the day and night previous to our show on 9th October, 1860, fell the heaviest rain we had during the fall; yet, notwithstanding the bad state of the weather and heaviness of the roads, we had a large attendance of exhibitors from all parts of York, also, from Sunbury, Queen's, and Saint John. It was generally known that good accommodation would be provided for stock, and buildings to protect produce, !c. This confidence was not misplaced, for all was in readiness. The visitors and exhibitors, during the two days of show and fair, occupied themselves in examining the show in all its parts, and returned home well satisfied with their visit and the arrangements.

from the transactions of the York County Agricultural Society, 1860.

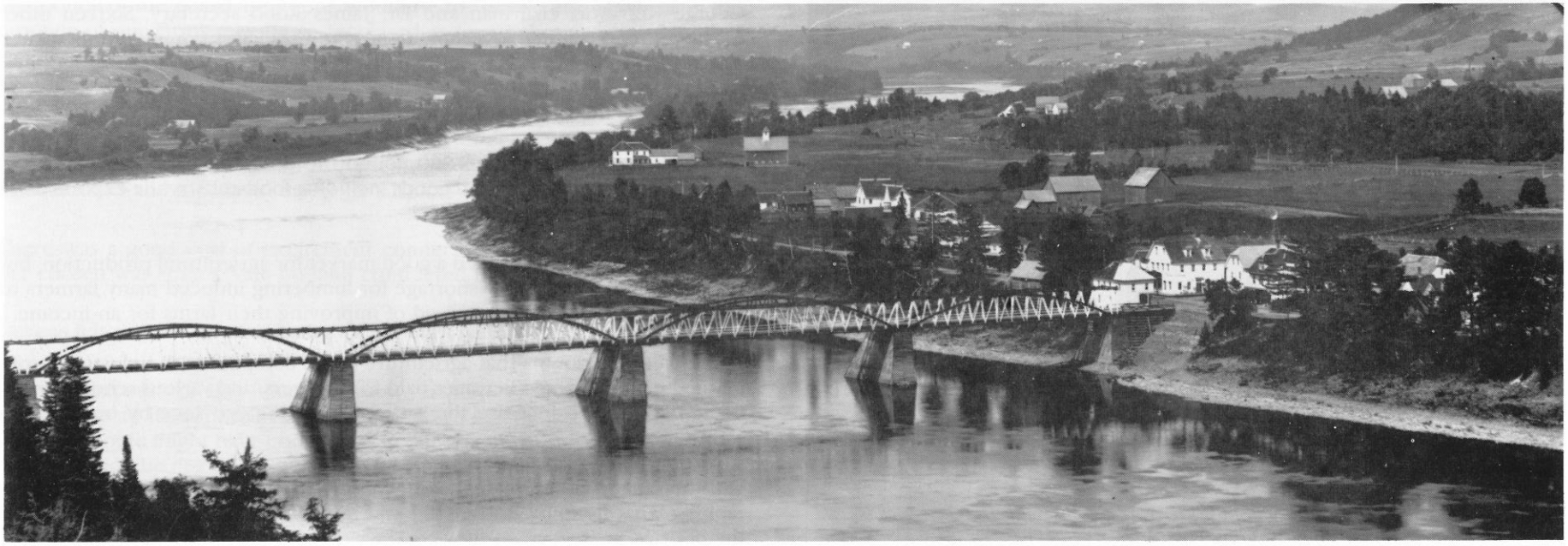
Marketing hay at Fredericton about 1870 (N.B. Archives).

Winter in Fredericton in 1832 (N.B. Archives).

The Saint John Market with sides of beef for sale (N.B. Museum).

A lumberman's camp in the forest. (N.B. Archives).

Grand Falls (top) and Florenceville at the turn of the century. (N.B. Archives Photo).



Water power was a means of driving the grist and lumber mills in a province blessed with numerous streams. (Kings Landing Photo).

THE FORMATIVE YEARS

1860-1910

The absence of government agencies to deal with agriculture led many communities to form their own Agricultural Societies to advance the state of farming. The most common activities of the societies in their early days was the importation of quality livestock from England, the United States and Nova Scotia, and the importation of seed grains.

The basis for the first Board of Agriculture for New Brunswick was to watch over these societies and to make grants to them for their use under the careful eye of the government. Based on the "Robb Report" in 1856, the legislators allocated the funds to the new Board of Agriculture and appointed its members.

The first report of the Board was published in 1860.

George Kerr was chairman and Dr. James Robb secretary. Sixteen other members representing government and farm societies completed the panel. The principle work of the new board was to supervise the local agricultural societies springing up in the province and to provide, by way of essays and other means, information of practical use to farmers.

Dr. Robb, in his report for 1860, found the province importing £311,134 pounds sterling of agricultural goods including foodstuffs, while exports were only at the £190,618 pound level.

The lumber industry provided a good market for agricultural production, but Dr. Robb found the labour shortage for lumbering induced many farmers to seek the sure wages there instead of improving their farms for an income.

There were big doubts that agriculture could compete with industry, particularly the lumber trade in wages paid to labourers, and various schemes were being explored to increase the settlement of the province by immigration from Europe.

Dr. Robb made an interesting case for settlers to choose New Brunswick by rapping what he found to be "the seat of malarious diseases" in Illinois and the prairies.

"The prairie ague debilitates the system, and renders it an easy prey for the conquest of other diseases. The typhoid which prevails, results from malaria; and an ague subject not unfrequently dies of pneumonia (lung fever) in the spring," Dr. Robb wrote in 1860 while assuring would-be settlers that "this province has no such drawbacks" and "is an exceedingly healthy climate entirely free from fever and ague and probably as salubrious as any British Colony".

Writing in the preface to the second report of the Board of Agriculture in December 1861, secretary James G. Stevens said the first two duties of the new organization was to exercise sound management and control over the local Agricultural Societies and to diffuse sound views on the general principles of agriculture among the farmers.

"It must not be expected that the Board are to devise any new schemes of Agriculture; nor are the farmers to expect that by an original light in the science, sources of prosperity are to be opened up. Upon the proper application and husbandry of the knowledge and resources already in our possession, their chief benefit will arise; for it may be safely alleged that our farmers in general lose more by the neglect of the means and knowledge within their power, than they could ever hope to obtain by the reading or hearing of any new or improved system of husbandry", he wrote.

The policy of the Board, he wrote, would be to "devise means whereby the produce of our farms may be so increased as to supply our wants and that we no longer should, from want of proper endeavours, be compelled to pay so large a tribute to other countries for such articles as we are well able to produce ourselves."

The 1862 Report of the Board of Agriculture puts much stress on the first Agricultural Exhibition held under its auspices in October of 1860.

There was a good deal of excitement connected with this exhibition. The site chosen was Sussex Vale on land contracted from A. C. Evanson.

Stevens felt the whole affair had gone off very well.

"The endeavours of the Board to secure a perfect representation of our province in all its important departments were greatly intensified, not only that our people might have confidence in our resources and capabilities, and the Exhibition be made to accomplish its intended purpose, but also that the best specimens being prepared, an opportunity might be afforded of selecting from such to represent our Province at the Great Industrial Exhibition (1862) in London," he wrote in the report.

The Effect of Lumbering on Agriculture

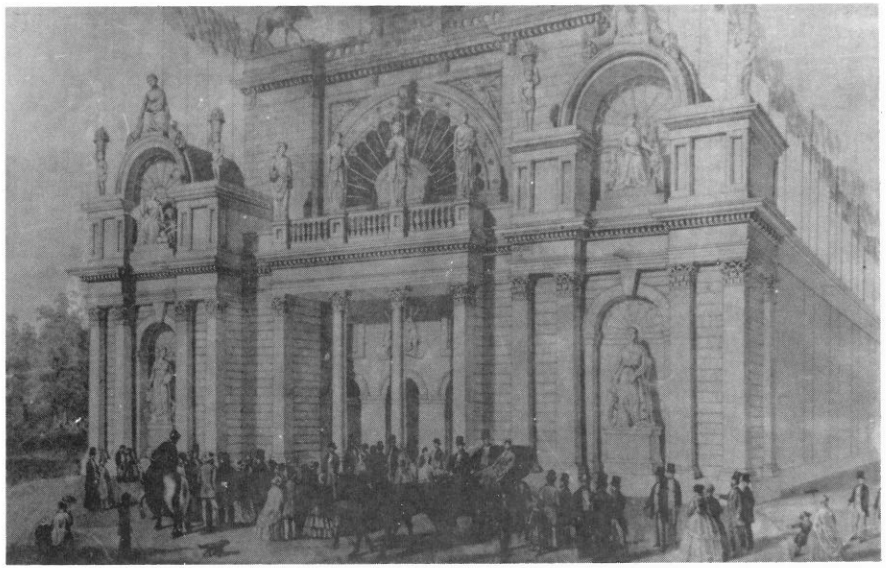
On the whole, therefore, I candidly confess that I see little prospect of New Brunswick becoming a wheat exporting country. So far from that being the case at present, there is as we have seen, a deficiency of four-fifths of what is actually required in the home market. Moreover, I am not sanguine that either wheat or Indian corn—the great food grains of North America, will ever become the general or staple crops of New Brunswick, or that they can be raised here at a price which will allow them to compete abroad with the same articles grown in New York, Ohio, or Canada West.

But if we cannot grow wheat enough to export—which is certain; nor enough to supply the whole of the home demand—which is uncertain; we may at all events, grow enough within the country to feed the farming portion of the community, which probably represents about one half of the whole number of inhabitants. There surely need be no difficulty in supplying one half of the home demand: but in order to effect even this moderate result as soon as possible, we ought to diminish the demand for wheat in the meantime, by a partial substitution of oats or of some such grains as are the true staples of the country, and at the same time apply greater energy and greater intelligence to the business of farming. To encourage us in this undertaking, it may be well to know that within the last ten years, the growth of wheat in Canada has increased 400 per cent. To supply even the half of our present home demand, implies nevertheless, more than doubling our present production—a result attainable only by the application of more labour, or more intelligence and devotedness to the business of farming; and farming as a business, implies at least maintaining if not increasing the native fertility of the soil.

Under our present actual circumstances, a few days labour at a boom or mill-pond brings enough wherewithal to purchase a barrel of American flour; and the silver dollar near the eye of a settler, as it has been expressed to me, so conceals the view of his distant farm, that when the fall of one penny per foot for lumber in the markets of Liverpool throws him out of employment, he is surprised to find his fences down, his fields grown up with bushes, and both himself and his snug little clearing generally, all gone to bad.

We want therefore in the first place, more labour, so that there shall be enough both for farming and lumbering purposes; and in the second place, we want such labour as we have, or may get, to be directed to the work of agriculture, with greater knowledge of its bearings as an art and a science.

by James Robb, 1858. (Legislative Library)



The first provincial exhibition under the Board of Agriculture was held here (at Sussex) in 1860. The old building burned later but when constructed cost less than $5000 and was completed in less than four months (Courtesy N.B. Museum)

The site was selected "after much discussion and conflicting opinions expressed" and an architect, a Mr. M. Stead of Saint John, selected to design the buildings required. This done, a tender was called for the main pavillion and livestock sheds as well as fenced enclosures and wells for water. Although these tenders didn't close until July 4, 1860, the work was required to be completed by September 20 "at the latest".

Stevens reported that the committee charged with getting the buildings ready were "unfortunate in their acceptance of the lowest tender" and before the job was done, the contract had to be taken from the contractor who was falling behind in the work schedule. The $2,000 estimate for the job proved too low and more money had to be found to get it done on time.

But the building job was done when the first exhibits started arriving by road and rail. New problems lay ahead for the organizers in that accommodation was very scarce in the small communities around present day Sussex. Workers were forced to commute home by rail to Saint John every day as they arranged the numerous exhibits. Reports point out that through a lack of accommodation some exhibits were not done as well as they could have been because the people responsible didn't have the time.

Judges selected to rate the various classes were also hampered by a lack of rooms and couldn't complete their work satisfactorily. Others had to be pressed into service to award the prizes. Although speedily accomplished, Stevens found some judging "imperfectly done" and not to the standards expected.

The public patronized the exhibition in larger numbers than expected and it had to be extended by three days to accommodate the large crowds.

As the public will, a gripe soon developed! Tickets had been printed which said "admit to the grounds" but, in effect, only covered the main pavilion. Another 15 cent ticket was required for the cattle enclosure and this was protested by some of the spectators.

Most agricultural communities had field days or "fairs" as they came to be called. The Provincial Exhibition would occur every two or three years. It moved from place to place to help develop major facilities until it finally found a permanent home as the Provincial Livestock Show at Fredericton.

There were stump pullers, cheese presses, candle and soap making apparatuses, butter in firkins, preserved lobster, and homespun at the big exhibition. The cattle mentioned were Durham and Ayrshire. There were fat oxen and various riding, carriage and draught horses.

The agricultural societies founded before or after the Board of Agriculture came into being were doing a decent job of helping their members. Equally important was the gathering of data on provincial production which, because of poor communications, had been impossible to assemble. Thus, it is difficult to get a true picture of Agriculture in New Brunswick much before the 1860 period.

Although the old minutes of many of the Agricultural Society secretaries have vanished with time, some are still in existence and provide a fascinating glimpse into the developing agricultural industry.

In 1860, we read from the record of the Harvey Agricultural Society in Albert County that 30,000 bushels of wheat were raised in 1600 acres of land and the practice was "to sow early" for the best results.

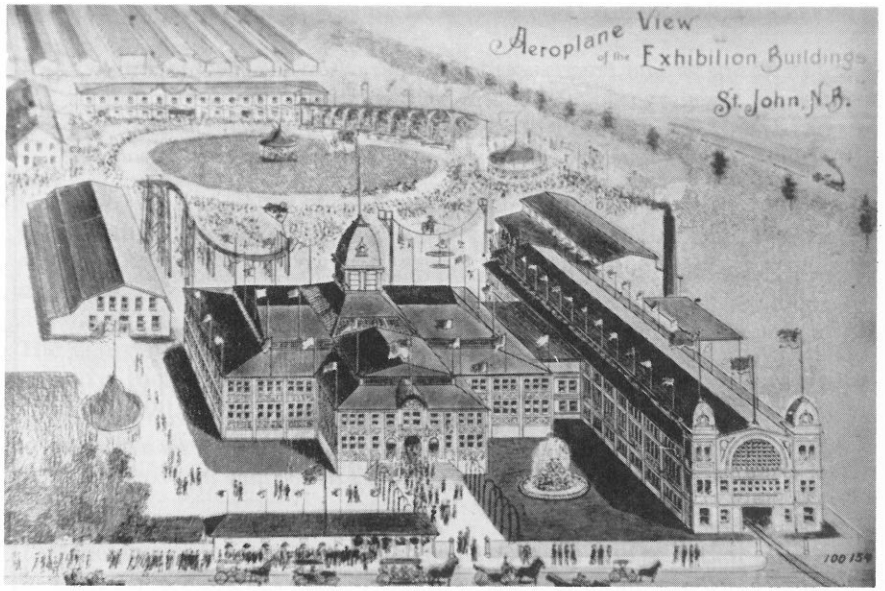
The Harvey area produced 150,000 bushels of oats the same year on 5,000 acres, 3,000 bushels of barley on 100 acres and 40,000 bushels of buckwheat on 1,500 acres. 200 bushels of peas were raised as well as 100 bushels of grass seed, 20,000 tons of hay, 200,000 bushels of potatoes and 6,000 bushels of turnips.

Attention was being paid to grafting fruit trees for better production and 500 acres of new land were cleared. The favoured cattle were Durham and Ayrshire; the Briton and Morgan were prized as horses, and South Devon and Native were highly rated sheep. The report also stated that a "very large quantity of pork" was manufactured, and poultry was kept in great numbers.

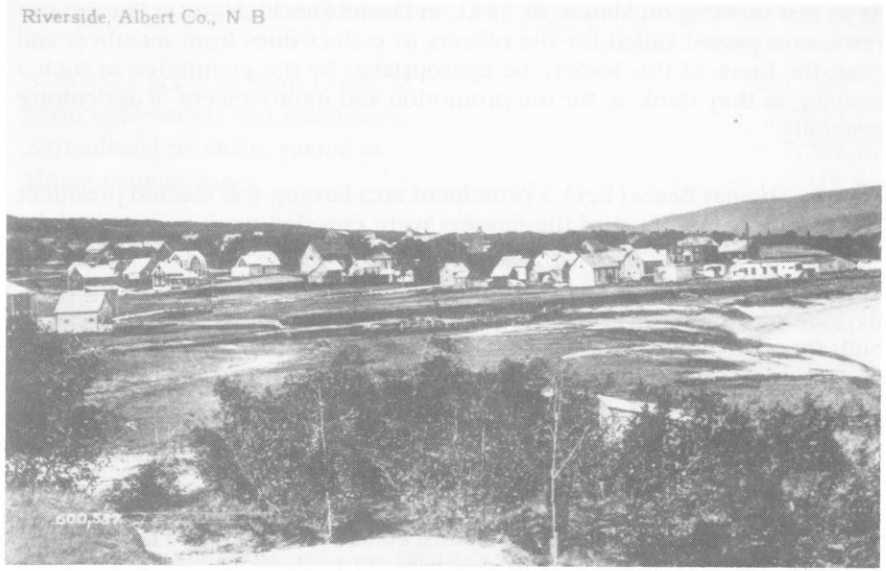
"Greater attention was given to the making and saving of manures; and several threshing machines have of late been imported. During the season, five hundred acres had been cleared; and the usual rotation there pursued was oats, potatoes, wheat or barley, then seeded. Plough after four years." Taken from the 1860 report of the society at Harvey, it illustrates that progress was being made.

Northumberland County Society's report for 1860 is surprising. 80,000 bushels of wheat were raised on 5,300 acres of land. 300,000 bushels of oats were harvested as well as some buckwheat and barley. 5,600 bushels of turnips were produced, and more attention was being given to raising peas.

6,500 pounds of maple sugar were made that year and 16,000 barrels of pork manufactured. Over 2,000 acres of land were cleared for farming during the year.



The Saint John Exhibition building was ornate and visually attractive. It was built in the late 1860's for a provincial show. (Courtesy N.B. Museum).



A view of Riverside in Albert County. Later work on the dykes and tide control structures have now made fields and a community pasture where only a marsh existed in 1860. (Courtesy N.B. Archives).

The Restigouche County Society reported, in 1860, 8,000 bushels of wheat, 80,000 bushels of oats; barley and grass seed were produced as well. 1,000 bushels of peas were raised but "drought, grubs and worms were detrimental" to this crop. 80,000 bushels of potatoes were harvested that year and 15,000 bushels of turnips.

The report noted that orchards had been "recently planted."

There were 24 agricultural societies in 1860 but some failed to submit crop information. It should also be noted that although the name of the county might imply it covered that area, more often than not, it was not the case. Northumberland County had at least three societies and Westmorland County more than that.

One of the best documented of the Agricultural Societies was the Sussex and Studholm Agricultural Society founded in 1841. Jim Thomson, the former editor of the Maritime Farmer, made the study and compilation of the minutes of all the meetings of that society from its beginnings up to 1980. A book has recently been published containing the history of the organization which helped the "diary belt" of New Brunswick achieve the stature it has today.

At its first meeting on March 30, 1841, in Daniel Sheck's Hotel at Sussex, one resolution passed called for the officers to collect dues from members and "that the funds of this Society be appropriated by the committee in such a manner, as they think fit, for the promotion and improvement of agriculture generally."

Captain Thomas Beers (Ret), a prominent area farmer, was elected president of the society and most of the farmers were enrolled upon payment of the 10 shilling dues.

By June of the same year, the Society was strong enough to purchase two bulls from Nova Scotia for use by the farmers to improve livestock. The sum of 21 pounds, one shilling was paid, and the cattle arrived.

By today's standards, it is amusing that the two bulls were boarded with farmers in the area and rules for their use, care and feeding were spelled out.

By the annual meeting of 1842, two more bulls were authorized for purchase and John Vail was authorized to purchase 20 bushels of seed wheat from Prince Edward Island for distribution to farmers. Six rams to help upgrade sheep stocks were also purchased. This lively interest in obtaining good breeding stock was to remain a hallmark of the Society for many years.

In June 1844, the society secretary, Mr. Evanson, was in Europe and wrote concerning the possibility of purchasing a thoroughbred horse in Northern Ireland for the betterment of the horse breeds in the area.

The horse, incidentally, had a fine pedigree and had sired remarkable colts. He was, however, totally blind and that has produced legends and stories ever since in the Sussex area.

The Society went from providing, at cost, small quantities of seed to member farmers to buying in bulk for them on such expensive purchases as fertilizer, lime and large seed quantities. The business grew over the years and fostered a major agricultural cooperative and feed plant for the area. It is still thriving under active farmer interest and control today.

Confederation—it brought lively fights and heated debates before the reality of 1867 created the Dominion of Canada. This new nation was already pushing westward and the great prairies would grow vast quantities of grain in the future. It was a nation of farmers, lumbermen and fishermen. The natural wealth was envied throughout the crowded, resource-poor countries of Europe, which were only too glad to share their excess populations who had no hope of owning their own land at home. The floodgate of immigration was about to open with interesting results for agriculture in this province.

Early Scotsmen and other English-speaking settlers had arrived in the Northeast of the province prior to 1850 and some had become prosperous farmers. The Acadian and French-speaking population had continued to live there and some farmed as well as fished. They were subsistence farmers and the English population mostly ignored them.

The difficulty of language made their rigid social order and religion their only supports. There was no information available to them in their own language and only small access to education. The Loyalist influence was still strong and dominated the official policy and thinking of the provincial leaders.

The Honourable Surveyor General

Dear Sir:

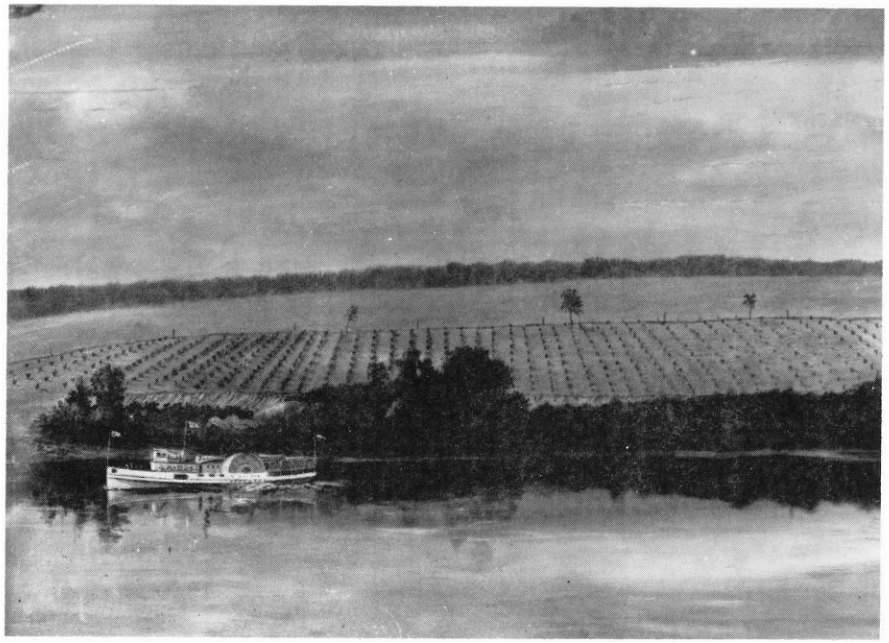
I have the honour to submit for your consideration, a few facts in reference to my land, and which I invite your kind attention and would venture to hope you will allow me a favourable answer.

As long ago as December 1875, I have made application for 200 acres of land in this settlement beings lots # 12 range 5, and lot # 12, range 6.

In passing through Fredericton on my way up here, I saw the late Surveyor General Stevenson who told me that being a married man with a family I was entitled to that amount of land but when my application for the above two lots was sent to the Crown Land office, it was intimated to me that only one lot could be given to each applicant.

Relying on what I had been told in Fredericton by Mr. Stevenson, I had in the meantime entered on possession of the two lots and had made some improvements on each. No doubting however that some changes in Law had been made the time of my seeing Mr. Stevenson and the date of my application I did not insist on my claim to the two lots, but about two years ago I made application for the lot I was deprived of under the Money Act, sending at the same time $3.00 to pay for possession of the same and I have had no instructions from the Crown Land office since as to whether the lot was sold to me or not. I have kept on improving the lot all the time and have paid my County taxes accordingly.

Letter and Notes of Dr. James William C. Walker of Tilly, Victoria County. Former civil war doctor and school teacher in Tilly 1856-69 Vic. Co. Historical Society Collection.



The riverboats played a valuable transportation role in the early life of New Brunswick. They plied the waters regularly as far north as Andover and moved freight as well as passengers to and from Saint John. This one is passing an orchard believed below present day Gagetown. (Courtesy N.B. Archives).

H. E. Dibblee, a member of the Board of Agriculture, apparently had endured the lengthy discussions of that board in its 1867 meeting on the subject of a model breeding farm for the province, and used 1861 census figures to make plain the value agriculture had in the province.

The figures are reproduced because they clearly illustrate the state of the industry. Incidentally, of the 39,456 persons who gave occupations for the census, 35,001 were "agriculturalists".

35,347 Horses, at $50 each	$ 1,767,350
69,437 Cows $20 each	1,388,740
18,111 Oxen $40 each	764,440
72,914 other neat cattle, at $10 each	729,140
214,092 Sheep, at $ 2 each	428,184
73,995 Swine $ 4 each	295,980
Making in the gross $ 5,373,834	$ 5,373,834

Add to the above —

3,787,524 acres of Farm Lands, at	$31,169,946
Farm implements and machinery,	1,542,421
Agricultural produce, valued at	7,709,382
Home manufactures,	711,394
And we have a total of	$46,506,977

Let us now compare this statement with the other industrial Resources and Interests of the Province, which is taken from the same Returns. We find that

Manufactures, (in General Abstract,) amounted to	$ 3,130,898
Ships built and registered amounted to	1,674,000
Lumber exported amounted to	2,920,000
Lumber home consumption amounted to	440,000
Minerals amounted to	380,000
Fisheries amounted to	518,530
	$ 9,063,428
Agriculture	$46,506,977
Balance in favour of Agriculture	$37,443,549

(Annual Report of the N.B. Board of Agriculture 1867).

The breeding farm would be paid for by decreasing the grants to Agricultural Societies. This was the sticker that carried the issue against those who saw the move as a very positive step toward improving livestock in the province. It was not a totally dead issue but it was one that kept coming forward from time to time and wasn't totally resolved by the board during its lifetime.

The 1867 meeting dealt with trying to regulate entry of cattle from Europe and the U.S.A. to prevent the spread of the disease "Rinderpest", and with standardizing weights and measures.

It appears merchants buying from farmers wanted 112 pounds (quintal) but paid only for the hundredweight.

The reports of the various agricultural societies in the province for Confederation year show a great deal of attention being given to technical improvements such as lime application, better use of manures for fertilizing, and importation of purebred livestock.

The production of agricultural goods led to many small industrial operations. The production was too big for cottage or home industries alone. Carding mills bought the wool from farmers, who were raising hundreds of sheep on their farms. There were factories making yarn from the wool, and a good trade was developing with the U.S.A. and Europe for this product. The dairy industry had to use its milk, and cheese factories sprang up, as well as creameries to make butter. Tanneries were also an important industry.

The farm woodlot not only supplied the fuel for the home, there was a market for wood in the villages and logs were still required.

Although the lumber industry never hit the boom times of the 1820's, it had remained a source of income and the demand was enough to help provide the cash needed for new farm implements, stock and, in some cases, more land.

The farmers found markets for their production in the larger communities and shipped out what they could. The opening of railway lines helped this process a good deal, but in the smaller commodities—eggs, butter, poultry and even fresh meat—there was still a barter economy going on with farmers trading surplus production not needed at home for staple items needed from the stores.

Steam boats had replaced sails on the lower St. John River and provided a faster means of shipment to the port. Smaller boats went as far up the river as Andover in high water and one excellent old report talked about the boats meeting at Gagetown. One had to wait while the other tied up at the wharf to unload supplies from Saint John, and take on cattle, potatoes and other commodities. Railroads were also pushing new lines into the province.

The government of the day knew more population was needed to increase the prosperity of the province. It was a much-debated issue as to how this could best be done. Visitors from Europe were taken with the vastness of the land and the good farms that it had produced. Scandinavian Countries were being bombarded with the news that the New World lands held riches. In the poverty areas of Europe, the word spread that Canada was a very good country in which to make a new beginning and a better life.

THE NEW IMMIGRANTS

By today's standards, it would probably be classed as false advertising! The promises held out to would-be settlers in Europe during the last two or three decades of the nineteenth century would sound almost too good to be true. In some instances, that was exactly the case!

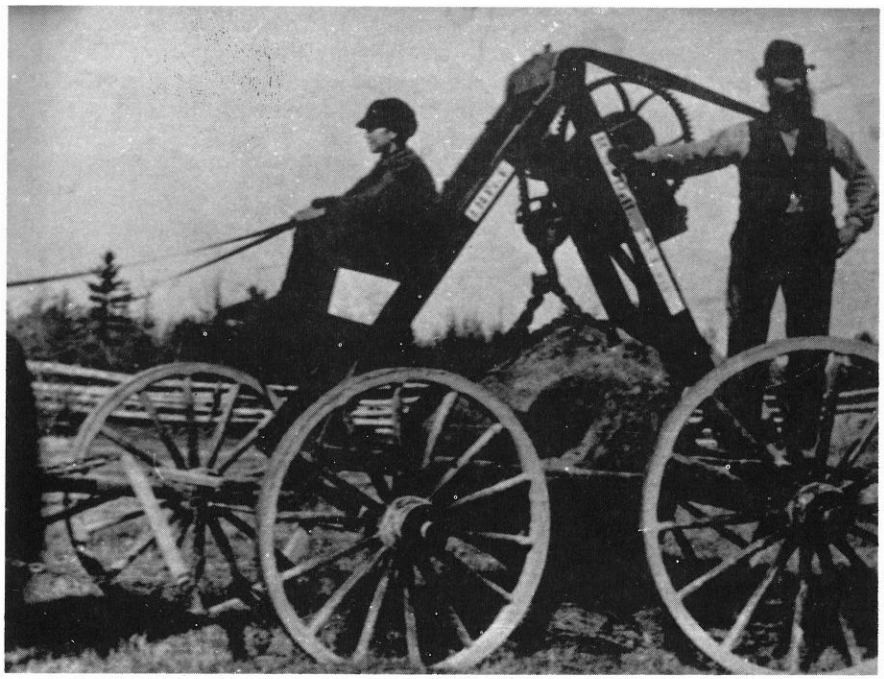
The conditions in Europe at the time were deplorable for a great many people. Dense populations clustered in squalor in cities as land holders found grazing livestock more profitable than having tenant farmers on their estates. An economic slump had cut available employment and the effects of rapidly improving mechanical technology meant factories needed fewer workers.

FARMERS AND DAIRYMEN'S ASSOCIATION OF CARLETON COUNTY.

The F. and D. Association of this county met at Florenceville on Thursday afternoon of last week. At two o'clock the time appointed for the meeting, John R. Ronald, president, was in the chair and W. A. Taylor, sec., was at his post. James Good, vice pres., was in the room, and about a dozen other gentlemen, among whom were the representatives of the Sentinel and THE DISPATCH. One by one members came in until at last an audience of about 30 was present. The president called the attention of the meeting to the fact that the farmers were paying too high freight rates and on motion of Mr. McLauchlan, Messrs. J. R. Ronald, J. R. Tompkins and S. Watts were appointed a committee to enquire into freight rates as they affect farmers, and report at the next meeting which will be at Centreville at such time as the executive committee may appoint for the annual meeting.

The subject set for discussion was "How to farm our land so as to get a fair return and not exhaust the soil." No one seemed prepared to tackle the subject. Finally in the spirit of desperation Mr. McLauchlan of Glassville took the floor and sought to prove that farming didn't pay and in spite of everything the soil was inconsiderate enough to exhaust. With few exceptions the speeches were set to the tune of pessimism. THE DISPATCH reporter went to the meeting in the spirit of meekness and the hope of knowledge. He was as meek and as ignorant as ever when he came out. Richmond, Wakefield and the lower end of the county generally was meagerly represented. The interest taken in the association is not encouraging. It is unfortunate that no one was burdened with the responsibility of preparing a foundation for a good discussion.

(Woodstock Library Archives.)



Upland farming in New Brunswick was not made easier by the large quantity of stones left by receeding glaciers. Contraptions such as this wagon mounted stone mover helped with the work. (Courtesy N.B. Museum).

The Rt. Rev. John Sweeney, vicar-general of the Diocese of Saint John, was an extremely conscientious man well-known for his compassion and humanity. The Irish in the prelate's character made for a firm determination and strong will as well.

Rev. Sweeney was disturbed by the plight of his fellow countrymen who had fled the homeland because of the exploitation by absentee landlords that had reduced the tenant farmers to penury. The revolts in Ireland against British Rule had compounded the problems of many who were virtual refugees with no possessions. The failure of the potato crops, due to disease, caused widespread hunger and had driven many a tenant farmer from his small holdings.

The immigrants from Ireland arriving at Saint John during the 1850's—about 8,000 a year—found that jobs were scarce. Many moved on to the United States. From Ireland, over 37,000 people came to New Brunswick between 1840 and 1860. Some found jobs, particularly in the lumber camps of the Miramichi, while others acquired farms.

Those fortunate enough to find work in North America wrote to the folks at home. Their plight had eased and they wrote glowingly about the vastness of the new lands. Money was often sent to help out at home or to pay the passage for a relative to emigrate. Some of the landlords of vast estates paid the passage for tenants to be rid of them. The fare was as low as $10!

Msgr. Sweeny knew agriculture was the best pursuit for his people. He formed an Emigrant Aid Society at Saint John in 1860 in response to the growing problems of his countrymen in that city.

The Aid Society made application for the survey of several parcels of land. 10,000 acres in Westmorland near Salisbury were selected for division into 100 acre farms. At Grand Lake, 20,000 acres were divided near the Canaan River, and another 10,000 acres set aside near Gaspereau, north of Salmon Creek.

The first of four surveys was ordered for the northeastern part of Carleton County. This would become the Johnville area. The first 10,000 acres was carved up into 100 acre lots. The applications for these farms pouring in to Bishop Sweeny proved the demand would exceed the supply, and more land was petitioned as early as 1861.

The "Labour Act" provided a hundred acres of land to every man not owning any, and intending to settle in New Brunswick. There were provisions to permit sons 18 years of age and over to settle next to their fathers, and the government required no cash payment for this land. The settlers were required to build their own roads to the value of $60 for each 100 acres granted.

BISHOP JOHN SWEENY OF SAINT JOHN. (Courtesy N.B. Museum).

JOHNVILLE

Father Thomas Connolly, a close associate with Bishop Sweeny, was credited with naming Johnville as the new Irish Settlement in Carleton County. A Saint John native of Irish immigrant parentage, he worked hard to get the settlers to the new land. Few of them had used an axe before—cutting trees was a crime in Ireland when they left—and he had to show them how to do it.

A handbook put out about this time for new settlers of the land showed agricultural implements and home supplies, with their prices. A stove and a steel plough each cost about $16. Mowers were $75 and grain reapers $100. Horses were selling for about $100 each and cows from $16 to $30 depending on the breed and quality.

There was no lack of good suggestions for the new settlers. The problem was many could not read them because of the language barrier or lack of education. One book described a method for peeling the bark from a big spruce trees in the summer by girdling the tree to produce strips of bark about seven feet long and the circumference of the tree. These were piled under weight to uncurl them. Once flat and dry, they were used as siding in place of shingles for the crude homes built by the settlers.

A cellar dug under the home was also a requirement for the storage of provisions for the winter months.

Hugh McCann and his wife were probably the first of the Johnville settlers to arrive in the fall of 1860. Others soon followed. By 1866, John McGuire, a newspaper writer from Cork, Ireland, and a member of the British Parliament, visited the area to get material for work he was doing on the fate of the Irish immigrants in the New World. He left a very interesting account of his visit to the McCann home and the fiery spirit of Mrs. McCann.

The McGuire account somewhat underplayed the hardships of the early arrivals but it did show their resourcefulness and determination to become good farmers.

By 1869, Johnville was well established. There were 119 families living there, for a population of 652 souls. 3,570 acres of land had been cleared from the 11,900 acres held. Crops were good with 1,785 tons of hay harvested, 23,570 bushels of oats, 28,750 bushels of potatoes, 20,000 bushels of turnips and 20,700 bushels of buckwheat, in addition to other grain and vegetables.

While still in its first decade of life, the new settlement boasted 278 horses, 654 cattle, 1,190 sheep, 200 oxen, 416 hogs and 2,300 young cattle. Not a bad beginning!

Johnville continued to grow and prosper. Agriculture still is the backbone of the community and the potato has become the major crop. The success of the Johnville "experiment" was used as an example by the government to persuade other Europeans to try the land in New Brunswick.

We are indebted to W.P. Kilfoil for the record of the early days of the settlement and its success over the years. His 1962 story of the Settlement of Johnville gives us a valuable record of the proud heritage that exists there.

NEW DENMARK

In its move to acquire settlers, the Government of New Brunswick was easily convinced to provide land for new settlements for European farmers. Land and easy acquisition policies were the attractions.

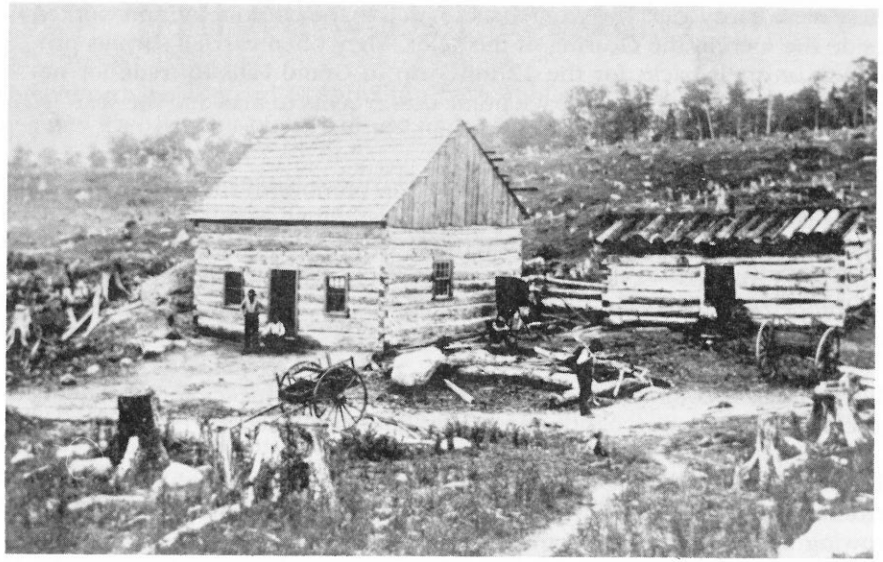
About 1870, the government entered into an agreement with two gentlemen to attract about 500 Scandinavians to New Brunswick. Two-fifths of these had to be males 18 years of age or over and the provisions of the "Labour Act" for granting farms still applied with a few modifications.

The men for the new settlement could have two years of employment on the railway, developing in New Brunswick, or at other work for a wage of "not less than $1 per day".

We are indebted to the New Denmark Historical Society and Women's Institute for the records they have preserved concerning the settlers and their hardships in a strange new land. The small museum at New Denmark, near the site of the first permanent home, provides a very candid look at how the community developed over the years.

On May 31, 1872, 29 people left Copenhagen, Denmark, for New Brunswick. These included six families, with a total of ten children, and seven single men. Under Captain Heller, the organizer of the colonists and the man responsible for acquiring the promise of land in New Brunswick, the party arrived at Saint John and began the journey up the St. John River by steamer. They arrived on June 19 at the Salmon River south of Grand Falls. The parties were still two miles from their homes, and made the final part of their trip on a horse-drawn sled.

The provincial government constructed this Emigrant House at New Denmark to house the emigrants until they could build their own homes. (Courtesy N.B. Archives).



The early immigrants to New Brunswick from Europe often found the first years very trying ones. Their first homes were crude structures providing little comfort and space. (Courtesy N.B. Museum).

It is not difficult to imagine the shock these Danish settlers received when they viewed their new holdings. Familiar as they were to the rolling hills and fine fields of Denmark, the steep hardwood ridges, covered with large trees, and only few clearings for crops, were difficult to comprehend.

The government had kept its bargain. An "Emigrant House" had been built and a road cleared for the settlers. They could live there until their own homes were ready and land cleared for crops. Three of the families found the situation impossible and soon left, but the Anders Carlsen, Niels Christensen and Lars Clausen families decided to make their homes in the strange land.

The Danes did not understand the language of the closest communities nor could they read the information published to help new settlers. The early clearings were made by cutting the trees and burying the trunks instead of burning them. Between the stumps, the first meager crops of grain, vegetables and potatoes were planted that first summer.

A New Denmark History by Vinal Christensen, New Denmark Hist. Soc.

Times were hard. The people were near starvation at times. I remember my mother telling about digging up their seed potatoes that they had planted one spring for they had nothing else to eat. She also told me about her walking to Fort Fairfield, Maine to work, a distance of about 40 miles because she did not have the money for train fare. Also long intervals passed with no correspondence to their relatives in Denmark because they did not have money for postage. Some of those first settlers had to walk to the town of Grand Falls, a distance of from ten to thirteen miles, and carried groceries home through the woods. The roads were not much more than a path. Sometimes they had to carry a hundred pound bag of flour home on their shoulders. With perseverance they soon had a little land cleared between the tree stumps so they could plant a few vegetables and a little grain. After some time a few of them got an ox or a horse and some crude tools and machinery. Then later, they acquired some cattle, pigs, and hens and soon commenced to see the rewards of their hard work. In 1884, the first church was built. The people in their poverty had managed to build a church not long after they had arrived. This was St. Ansgars Anglican Church.

These were hardy folk! The women were used to the outdoor life and worked beside the men in the clearing of the fields. They often carried surplus production on their backs for the 12 mile trip to Grand Falls to trade for necessities. A letter to the folks back home cost 5 cents to mail and the scarcity of cash made them few and far between.

By 1892, the herds of cattle had increased in number to the point where a cheese factory could be established on a co-operative basis. This "cheddar" type of cheese found ready markets in the nearby settlements and wagonloads of the large rounds—some weighing 80 pound—were taken to Grand Falls and shipped by rail to Saint John. Some of the cheese was exported to England and found "excellent in every way".

This early cash commodity did much to provide the means for expanding agriculture and for purchasing more stock and implements.

The potato helped get the hills cleared of trees in New Denmark. The Danish settlers found that they had a market for their potatoes and good land for growing them. At first only hand-cultivation was required, but soon implements had to be used to meet the workload required by several acres under cultivation.

The crop had to be moved several miles to rail sidings for loading, and sledloads of barrels were covered with blankets in the winter. Oil lanterns were lit and set among the barrels to ward off the chill.

The colony would become a major potato production area in the future and contribute well to agriculture in New Brunswick.

THE SCOTCH COLONY

Captain William Brown, a seafaring man of high principles, had a great idea! He would found a new colony, "Scottish in character", in New Brunswick to give poor tenant farmers and labourers a new life in a new land.

In common with most of Europe, the Scottish "lairds" owned vast estates and the lower classes worked for them. These humble, proud Scotsmen wanted their own land but had little hope of getting it in the homeland.

In 1872, after having heard of the success of the Irish settlements in New Brunswick, Captain Brown and Robert Stewart came to New Brunswick. After hours pouring over maps with the provincial secretary of the day, a plot near Grand Lake was rejected for a tract in Victoria County east of the Village of Perth.

The horse not only pulled machines but provided the power to make the wheels turn. Through treadmills, the horse often provided the means to run threshing machines, wood saws and other implements. (Courtesy N.B. Archives).

The captain informed provincial authorities that he would get fifty families to come to New Brunswick as settlers. This must have pleased the authorities who, since 1850, were impressed with the Scottish methods of agriculture and desired more settlers from that county.

The government was generous with the Scottish immigrants. There were 200 acres of land for each family, and 100 acres for each single man. The province would build the roads required and clear 2 acres of land on each farm as a start.

A grant of three pounds sterling was made to each settler over 12 years of age, and two pounds to those under that age either to assist in passage or to go towards a home to be constructed before the settlers arrived in the colony. The province also agreed to pay the transportation from Saint John to Kilburn.

Captain Brown had little difficulty getting people interested in leaving Scotland. They sailed from Glasgow on the "Castalia" and arrived at Saint John, with their number increased by one, as a baby girl had been born during the passage.

After the May 10, 1873 arrival, they were transported up the river and arrived earlier than expected. There was still a foot of snow in the woods!

The homes were under construction but the stoves and supplies were still stored at Kilburn. Some of the new arrivals had to find whatever accommodation happened to be available for the first few weeks, until they could move to their homes. One party slept in a grist mill.

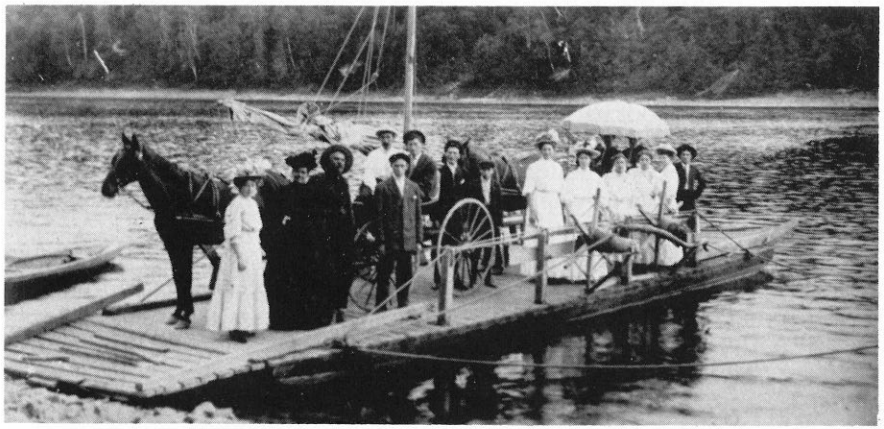
The urge to get on with the work of settling was strong. Land was rented from farmers along the river and the first crops planted. A total of 446 colonists arrived in that year and the one following, and although some moved on to other areas, a great many founded the farms in the hills of Kincardine, Kintore and Bon Accord.

The "History of the Scottish Colony" published in 1969 by a committee of the Andover-Kincardine Pastoral Charge of the United Church of Canada provides a wealth of material on the trials and tribulations of the first settlers.

Miss Jean Drum recalled buying her first primer and slate pencil for school with a dozen eggs she carried to the store in a basket, to trade for the required items.

The Scotch Colony still survives. Although the Scottish population has been diluted over the years, traditions are still strong and Robbie Burns is honoured every year.

As with so many settlements along the Upper St. John River, the potato was to play a valuable role in the life of the settlement. Cultivated at first for consumption at home, it did provide some surplus for cash, and together with sales of lumber and logs, gave the early settlers an income.



Transportation across the St. John River before the turn of the century was often achieved by horse treadmills running the ferry propellers. (Courtesy Perth Andover Library).

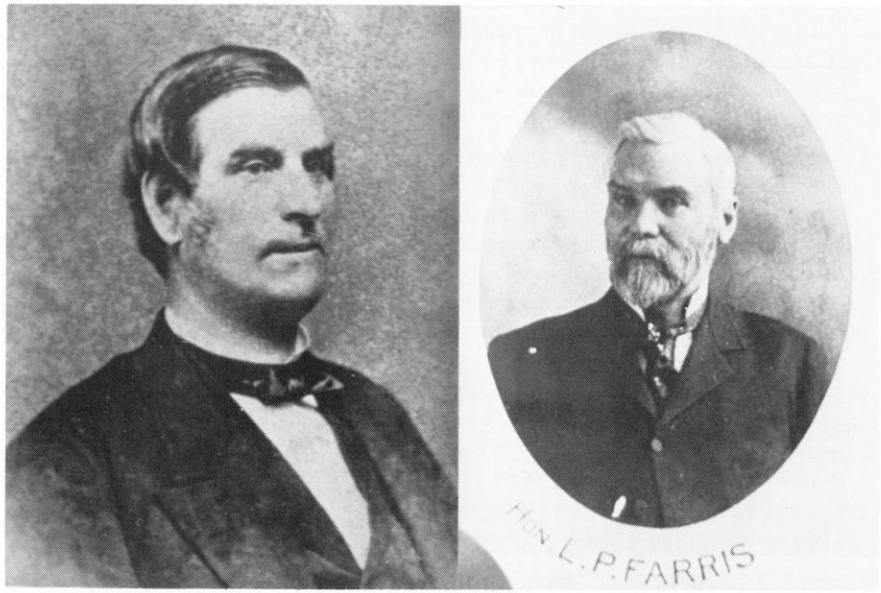
THE NEW DEPARTMENT

The old provincial Board of Agriculture was abolished in 1888 and replaced by a new Department of Agriculture under Commissioner Charles LaBillois.

Writing in the 1900 annual report, Commissioner, L.P. Farris found the year to have been "a remarkable one" for agriculture in spite of poor weather in the spring and fall. Hay and oats were in good demand at a good price, for the British army was fighting the Boers in far-off South Africa. Cheese and butter from New Brunswick found a ready market in England and formed the major part of provincial exports.

A new farmers' organization, the Farmers Institute, had come in being. Possibly because of the earlier suggestions of Dr. Robb who had advocated Farmers' Clubs for many years these new organizations were busy helping educate the agricultural community on modern production methods. Outstanding speakers were brought to meetings to give their views.

Mr. Farris reported that during the year 1900, 73 meetings of the Institute were held and 10,322 people attended. Of note was the fact that 27 of these meetings were in French-speaking areas and a prominent Quebec agriculturist was the guest speaker.



Charles LaBillois *L.P. Farris*

MURRAY LAMONT, BLACKSMITH AT GLASSVILLE.

I first started to blacksmith, came out here and worked for my uncle on the tenth day of June nineteen-eight. I was quite young, I was only eighteen and there wasn't very much choice in them days and that seemed about the only job around handy and my uncle wanted me to come out and work with him so that's how I happen to get in blacksmithing.

It was a hard life, shoein' horses was hard work. We used to buy the shoes just flat and then make the shoes, put the cork on them and pare the horse's feet down level so the shoe would go on and nail them on and fix them up around. Some of the horses were quite bad to hold their feet but we had kind of a rack to put the bad horses in but a lot of the horses were shod quite often and they got so they'd stand pretty good. As a rule most people would have their horses shod about every three months, all four feet. You'd buy iron at about four cents a pound then, horseshoes at about four cents a pound. I put four new shoes on a horse for a dollar and twenty cents and sometimes you see you'd take the old shoes off and fix them up and put them back on for sixty cents. If a horse was on the road he'd wear his shoes out quite fast but if he's just workin' around the farm, maybe them shoes would do him all summer. I never got a bad kick from a horse, I got some thumps but never got kicked bad.

We used to build sleds and did general farm repair work. We built sleds for logging and sleds for around the farm, they called one a long sled and the loggin' sled was two separate sleds. We done all the work by hand, there was no machinery in them days, all hand-work. In them days we used to build them for twenty-five dollars for a farm sled and for loggin sleds they'd be about fifty dollars. With the two of us workin' it would take pretty close to a week, workin' by hand.

I bought the shop from my uncle in August 1910 and I run it then myself after that. When I bought it from my uncle we used to have what they call a bellows, we'd pump it up and down. It worked pretty good too but I just kept that a year then I bought what they call a blower, you turn the crank. I can remember the most horses I shoed in a day was twenty, that was my record and I think that was on the fourth day of August 1912. I used to keep a day book and I think I have it marked down in my day book. Twenty was my record and my uncle, his record was seventeen so I beat him three horses. On average, if you done maybe five or six horses you were doin' pretty good. My uncle never had too many tools and all of his equipment was gettin' wore out too so I had to keep gettin' new stuff all the time. About the main stuff you'd have would be the anvil and blower and shoein' equipment and you'd have a rasp and a hammer and nails. It was about 1920 when I got a gasoline engine and had a saw and planer and stuff like that.

From an interview with Marilyn Kaver in 1982.
(Mr. Lamont was born in 1889).

The remains of an old store at Cole's Island. The area once boasted the hugh West store and lumbermill. (Photo by Phil Brannon).

Flour from New Brunswick mills was "of excellent quality", as judged at an international exhibition. The average yield for wheat grown here in 1900 exceeded that for both Ontario and Manitoba.

A provincial dairy school had been established to train producers and manufacturers, in view of the importance of the dairy industry to the province. This school at Sussex was under the direction of Harvey Mitchell and the courses covered both factory and home butter production, cheese manufacture and animal husbandry.

Three dairy superintendents split up the province between them and were busy inspecting the plants and herds and helping farmers where they could.

In 1900, 54 cheese factories were operating in the province, buying milk from 1890 producers. Over 19.3 million pounds of milk was used to manufacture 1.8 million pounds of cheese at a value of $189,706.

Butter was being made in abundance. 462,600 pounds were made at a value of $94,618 for the 33 creameries in operation.

THE RURAL STORE
by Marilyn Kavers from an interview with Ruby (Sinnett) Graham (1982).

"Bear Island was just a small country community. It consisted of quite a number of houses, an Anglican church, a Baptist church, a school, blacksmith shop, hall and in the early days, my grandfather's woodworking shop.

My father's store was a fairly large one. It had double doors, a verandah on the front and also a hitching post and railing. As a little girl, I had often seen this just filled with customers' horses which were tied there. But in later years cars took over so that towards the last of my father's storekeeping years, it was cars rather than horses. As you went in the store, there were long counters on each side. Then there was a back store with folding doors between the front and back, or an archway I believe it was, and in that was kept molasses, oil and vinegar barrels and all that type of thing. Upstairs—wallpaper and a few other things like that. Then downstairs—one side was dry goods and sort of a druggist's department and on the other side was entirely groceries and hardware. In the early years, practically everything was in bulk, large barrels of oatmeal, barrels of sugar and of course flour. Everything had to be weighed out. Of course, some people bought barrels of flour but others would want only a little, so you had to weight it out. I remember the tobacco very well. It came in what they called "figs", long bars. We had a tobacco cutter and you'd slip the bar of tobacco in where there was a crease and cut that off and that was fig of tobacco, very cheap. That is, if I remember right, chewing tobacco that the men bought.

There were no set hours in any of the country stores at that time. If anyone came at five o'clock in the morning and wanted to get in, they'd go to our house, wake up my father and he'd let them in the store. Our house was so near the store that we could be there in half a minute. The store was really open all day from say eight or nine o'clock in the morning until the evening, about ten or even eleven if necessary."

The 1900 Departmental report is a textbook as well as a statistical data source. Apple growers found illustrations of destructive pests that could damage their crops and a spray guide to control them. There was also reproduced a letter from an importer in England on how he wanted apples packed for shipment.

For poultry producers, an article featured a new incubator heated by an oil lamp for hatching eggs, and beekeeping was also being advocated.

The Farmers' and Dairymens' Association which emerged from the Provincial Farmers' Association had patched up quarrels with the government over the termination of the Board of Agriculture in 1875.

It was their honour at the annual meeting of 1900 to have both provincial commissioner Farris and the Minister of Agriculture for the Dominion of Canada, the Hon. Sidney Fisher, in attendance.

The horse was still the main means of power for the farm, but the gasoline engine was being talked about and new machinery was coming into common use on the farms. Factories replaced most of the home carding and spinning of wool. Threshing machines were common in the fall and winter moving from farm to farm to collect the grain. These usually had steam engines although some using horsepowers were still in use.

With less than a decade and a half gone in the new century, few would interpret the shots that killed an archduke in the Balkans of Europe as a major event for New Brunswick agriculture. But that shot which launched the world into a four year war would provide the founding events for the potato industry in New Brunswick and its growth in subsequent years. It would also bring new settlers to New Brunswick and trigger new problems for the future.

This old single row potato digger was drawn by horses but represented a big jump from hand digging.

THE TURN OF THE CENTURY ON THE FARM

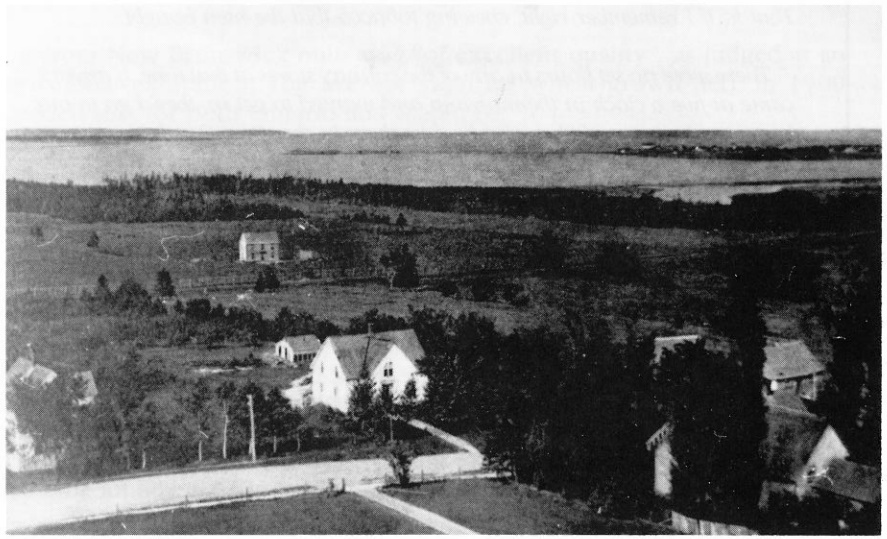
I started school when I was five years old, that would be about 1907. During that time as soon as we got home from school why we had chores to do. There was wood to be carried in and there was water to be carried from the spring or well and the woodbox filled up and chores around the barn looking after the cattle. As soon as I was able to pull a milk stool up to a cow why I was milking cows. The whole farm contained about six hundred acres but of course the majority of that was in lumber but the farming area itself, the cultivated land, probably would be about forty to fifty acres. We generally kept two teams of horses and ten or twelve milking cows along with some hogs and hens and turkeys. We also had a maple sugar grove and at first why we would do the boiling in pots and we always made enough for ourselves. We didn't do it commercially. We always would have our own pork and beef had to be killed in the fall and salted down to do us through the winter and we didn't really require a great deal of cashflow because we were quite sufficient as far as food was concerned. We had our own thrashing machine and a sawing machine for sawing wood. It was done with a horsepower and the old team would get up in that horsepower and tread those lags all day and the dust from that old Benjamin thrashing machine was something terrible. You couldn't see, sometimes you couldn't see one man to the other there was so much dust. What we would do was gather the grain into the barn and then before Christmas after everything was hauled in, the harvest was all in, why we'd have two or three days of thrashing the grain and we'd hire a neighbour or two to help. Our barn was a large barn but it was full of hay and everything and the straw had to be thrown outside and then as soon as we got done thrashing we had to turn around and put that straw back up, pitch it up by hand with hay forks up into the mow and tramp it and store it. That was a miserable, miserable job. I always detested that. We didn't work eight hours in those days and we didn't work five days a week either, it was mostly six and seven.

Robert Graham interview with Marilyn Kavers 1982.

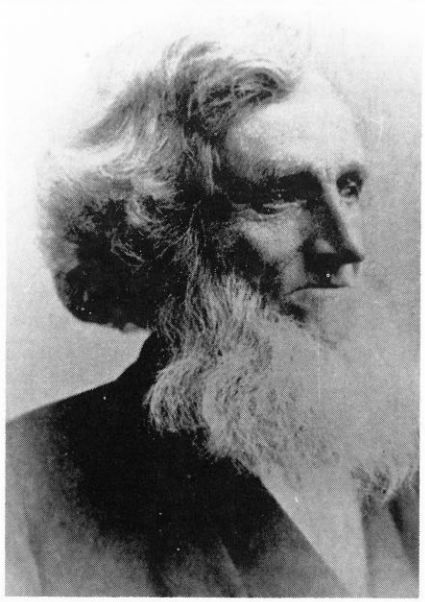
"Statute labour" was a unique feature of early settlement life in New Brunswick and did not end until well into the twentieth century. It was used as a means for obtaining roads and other public works.

Every able-bodied male was required, by law, to provide days of labour on public works—mostly roads. Those 18 to 21 years performed two days' work a year, while those over 21 were required to do four days. In addition, for each one hundred pounds sterling valuation of the property held, an additional day was required. The landowner could do the work himself, hire it done or pay about 25 cents for each day's work required, as his tax.

The old Gloucester County Creamery about 1895. (Courtesy N.B. Archives).



An early view of Shediac. (Courtesy N.B. Archives).



FRANCIS PEABODY SHARP

1823-1903

"The Most Eminent Horticulturalist in America".

Few men achieve as much in their lifetime as Francis Peabody Sharp did. Few are so little remembered as this man who contributed so much to the horticultural industry of New Brunswick and, indeed, North America.

Sharp originated several new varieties of apples and plums, he adopted close planting and dwarf tree culture that was three quarters of a century ahead of their time, and developed the first commercial orchard industry in New Brunswick along with an extensive nursery to furnish stock for other orchards along the St. John River.

His son-in-law, E. Tappan Adney, wrote in 1910 that Sharp styled himself a practical man more than one for theory but added "no great discovery has ever been made except by men who directed their study to the principles involved. Such men observe, ceaselessly experiment, often doing so aimlessly to all appearance, until out of this work emerges some great "practical" result."

Sharp was born just across the river from Woodstock of Loyalist stock. His interest in apple trees was probably early cultivated by the trees the children kept in the farm orchard. When his interests turned to horticulture, he read the available publications of the day and in a small diary recorded from 1846 to 1850 the results of his first work in apple tree culture.

Fortunately, Sharp did not subscribe to the commonly held belief of his time that New Brunswick could not grow successfully apples of fine quality. He tested every known variety he could obtain at the time. Through the propagation of seeds he produced the "Peabody Greening" and "Honey Pink" varieties.

From a lot of seed he obtained from Bangor, Maine, grew one shoot which had an interesting appearance and was allowed to stand over in the nursery until its second year. This was then grafted to an older stock and to quote from the Adney account:

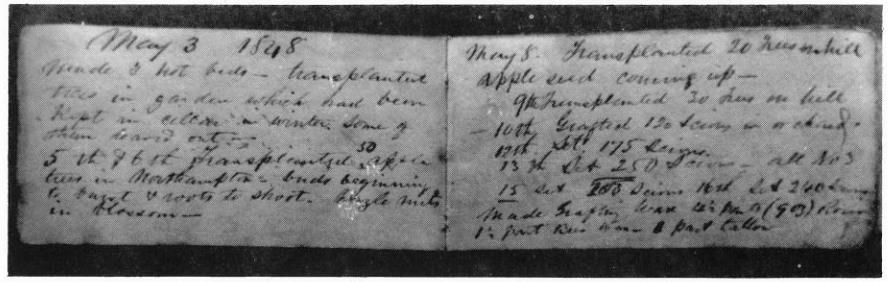
"Darias A. Shaw was working for Mr. Sharp, having general charge of the nursery when the first fruit came, ten or a dozen fine large, hansome apples. Shaw marked the tree, and then took the apples to the house. (The facts are as given to the writer by Mr. Shaw, by Mrs. Sharp, and Mr. Sharp himself).

"I saw at once their value," said Mr. Sharp, "and began propagating at once. It was the first apple of quality that gave evidence of being completely adapted to New Brunswick."

Boys kept stealing all the first apples until Sharp made a tree, and set it before his front door where it could be watched. When this tree was loaded with fruit, a basketful, it was the wonder of all the country about. This was the origin of SHARPE'S NEW BRUNSWICK APPLE, which many have seen fit to regard as the Dutchess of Oldenburg, a variety of Russian origin."

Sharp, in 1882, after comprehensive testing, pointed out some of the differences.

He tried hybridizing—a process of combining the qualities of two different trees to produce a better variety— and made about 2,000 crosses using his New Brunswicker. Several new varieties were the result.



The diary of F.P. Sharp (Courtesy N.B. Museum).

Mr. Sharp planted several large orchards on rented land and shipped to markets as early as 1859. He set his trees close together and pruned them heavily. An expert on the soils, he recognized the need for fertilizers and trace elements for successful cultivation.

His interests included pears, plums and landscaping as well as flowers and other trees. Through his understanding of the relationship between the roots and the rest of the tree, he induced earlier fruiting and "dwarf" trees but it would take a long time before this was generally accepted.

Amazing as it seems now, Sharp had 60,000 apple and plum trees in various stages of growth in 1887 and helped found a nursery in Albert County as well as in Maine and Manitoba.

Sharp improved the tools used in the apple orchard and recommended careful cultivation to produce a quality crop.

In 1887, he made over to his son, Franklin, the nursery business at Woodstock but that young man died untimely in 1892, 11 years before his father.

Although he had offers of high position and prominence, Sharp had rejected these in favor of his ambition to produce a better apple for New Brunswick. He had received no government assistance in his work.

He would probably be amused to see many of his ideas coming into general use almost a hundred years after his passing.

At Work in the large orchard at Upper Woodstock. (Courtesy N.B. Museum).

Biography of Minnie Bell Adney on her father F.P. Sharp.

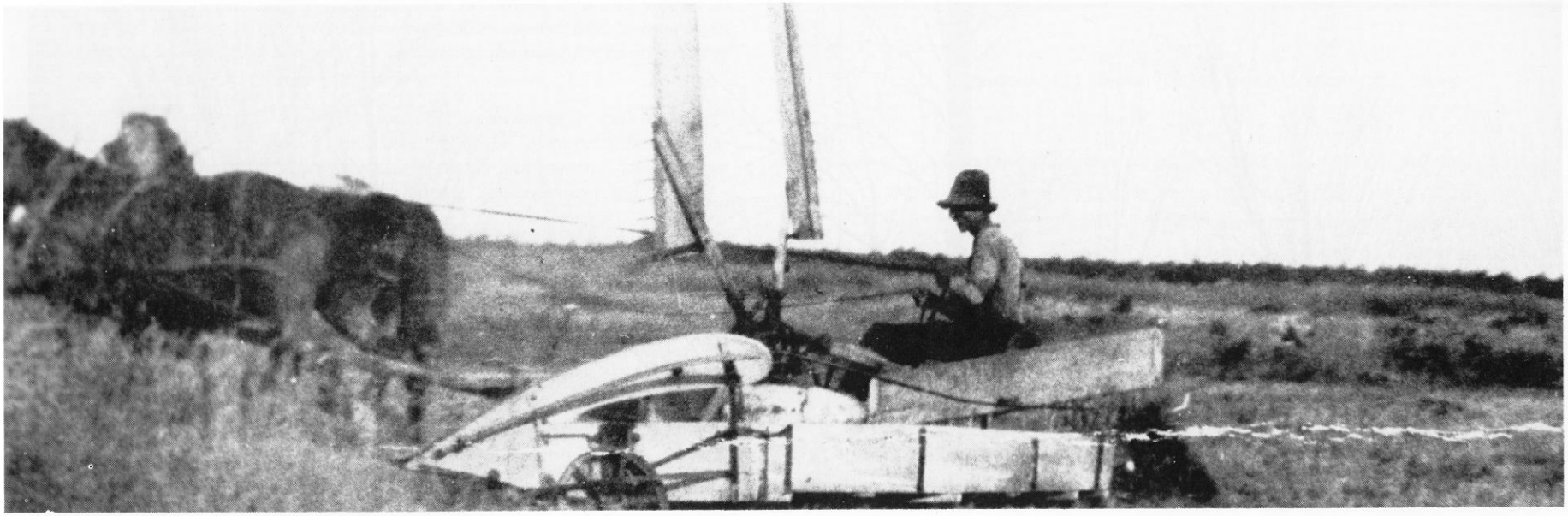
It seemed to me in those days that I lived in a veritable fairyland. I had a garden plot of my very own. In the center was a fine big apple tree upon which grew four varieties of apples—New Brunswicker, Alexander, Honey Pink and Red Astrachan. All sorts of hardy perennials grew all around. My father had a most beautiful garden and orchard, which under his magic hand blossomed and bore abundantly. The most gorgeous flowers of all kinds in their season boomed in riotous profusion and he raised to perfection apples, plums, red and golden raspberries, blackberries, pears and grapes. A long and high fence of boards was at the north of the garden, where tender plants and vines were trained. Against this sheltering wall the fruit ripened in the extra warmth coaxed from the sun's rays.

I had an unlimited capacity for hard work, being full of activity, both physical and mental, and I never knew fatigue. I simply led a glorious life at that time. During the fruit season I was up at daylight packing and shipping apples and plums. We exported from fifteen to twenty thousand barrels of apples and from five to six thousand boxes of plums each season. I have taken cars of apples to Boston, getting higher prices for them than any other apples on the market. I once took a car of plums to Boston, ordered for canning.

The Sharps', father and sons at this time, were carrying on a large industry. Nothing in the shape of fruit went to waste. The making of cider and vinegar in itself was a good going business. Large warehouses were filled in the fall and early winter with casks filled with cider which later was made into vinegar. A huge press made on an original plan of my father's with a capacity for pressing to thirty barrels of apples was working day and night. A crew of ten to twenty men with apple grinders and all the necessary outfit were kept busily employed. My father bought up all the so-called "natural" apple seedlings, and ground them up for cider and vinegar.

(Carleton Sentinal Oct. 10, 1919.)

A fine team of horses owned by M. W. Price. The horse has undergone a revival since 1950 in New Brunswick. (Photo by Phil Brannon).



An early rake reaper cutting grain. (N.B. Archives).

Later improvements to grain cutting machinery. (N.B. Archives).

Hay was always an important part of the provincial agricultural economy. (N.B. Archives).

1921 and the auto is on the farm. This proud owner with his new car in front of a farmhouse. (N.B. Archives).

BUILDING ON THE FOUNDATIONS LAID 1910-1950

Lieutenant Governor George Stanley added to the ceremony of the opening of the 1983 Legislature by travelling in a carriage and flanked by mounted guards. (Photo by Phil Brannon).

The Department of Agriculture for New Brunswick was slow in building up a staff. By 1910, when Hon. D.V. Landry was commissioner, he had a secretary and a clerk for office help, a superintendent of immigration and two dairy superintendents. A provincial horticulturalist had also been appointed.

The 1909 crop year was not great. The winter was an open one and apples proved a light crop with defective fruit. The horticulturalist, A.G. Turney, stressed the need for better pruning.

A well-known visitor, the tent caterpillar, was making his rounds in the province causing much destruction, and strawberries did not yield heavily.

The horticulturalist saw the need for canning factories to cut the imports of canned fruit to the province and carried out a round of demonstration work in orchards to give the growers some much-needed technical help. He found the old orchards in need of renovation and offered practical advice for would-be orchardists.

A Fruit Growers Association was very active at the time and held its sixth annual meeting at Fredericton. In spite of poor yields, the New Brunswick apples walked off with major awards in England and Nova Scotia.

The 1910 crops were good. But the figures show some signs that should have been interpreted as warnings for the future. Wheat production was declining as western grains could be brought in cheaper to make flour than they could be grown here. 1910 production was 265,848 bushels grown in the province compared to 406,853 only five years before.

Potato production was on the increase. During the year under review, 6,067,276 bushels were produced, which was up from five years before.

Carleton County led the way with 8,786 acres of potato production, Kent was second at 5,437 acres, Westmorland had 5,360 acres and Gloucester 4,894 acres.

There were some ominous signs for the dairy industry. Cheese sales had declined and, from 1905 to 1910, 19 factories had closed. The value of the cheese produced had slipped from $148,215 to $118,243.

One dairy superintendent put his finger on part of the problem. Many of the small factories were built in haste and as they grew older, problems cropped up with cleanliness, and in securing competent cheesemakers.

In 1912 the Dominion Department of Agriculture in Ottawa had appropriated the sum of half a million dollars to be divided among the provinces to encourage agriculture.

A permanent plan to provide grants to the provinces was adopted in 1913 when the Agricultural Instruction Act was passed by Parliament. The funds were on a scale that permitted increases each year until the maximum was reached in 1918.

The province acted quickly. In 1914 it submitted a plan to Ottawa for using its $49,400 share as follows:

Transportation of Agricultural Students	$ 1,500.00
Building, Equipment and Maintenance of Agricultural Schools	12,500.00
Equipment and Maintenance of Dairy Schools	3,000.00
Short Courses in Agricultural Work	1,500.00
Provincial Officers to Inspect and Instruct in Agricultural Work	2,000.00
Director of Elementary Agricultural Education	2,500.00
Courses of Training for Teachers	2,200.00
Travelling Instructors	13,000.00
Women's Institutes	3,000.00
Drainage and Soil Conservation	2,000.00
Demonstration Trains	1,000.00
School Gardens	3,500.00
Contingencies for carrying on any of the above services	1,707.20
	$49,407.20

(Annual Report 1914.)

Agricultural Minister Hon. J.A. Murray must have been a very active man. The quickness with which the provisions of the "Agricultural Instruction Act" were implemented was amazing.

R.P. Steeves, the newly-appointed Director of Elementary Agricultural Education, in his 1914 report, showed 1356 students involved in projects on agriculture. Seeds for school garden projects, literature and practical instruction for teachers were rapidly organized for the 32 participating schools. More schools were applying for admission to the program.

"The lack of teachers with the required knowledge and training to successfully carry on our work is a serious handicap," Steeves observed. "It will take time to meet this difficulty. Not only have teachers to be induced to qualify, but public opinion must be developed to demand such instruction in the schools."

At Woodstock, a Summer Rural Science School for teachers was held. It was the first part of a two-summer program to qualify teachers in the agricultural sciences. Close cooperation between the Agriculture and Education departments had developed and a program of instruction was established for the public schools.

Mr. R. Newton, the director of Agricultural Schools for the department, in his report for 1914, stressed the importance of training at The Nova Scotia Agricultural College, Macdonald College near Montreal, and Guelph in Ontario, but added there was a need for short courses at home for those unable to attend those institutions.

Through the will of the late L.P. Fisher, an agricultural and vocational school was available at Woodstock. Short courses were inaugurated in March of 1914 with beekeeping and horticulture the first offered. The stress was on the benefit to the farmer and on practical demonstrations.

Courses in field crops, soil management, livestock, poultry and dairying soon followed. Evening sessions were held for farmers who could not attend in the daytime.

A second Agricultural School was under construction at Sussex and a short course of four days' duration was planned for Newcastle.

The "Better Farming Special" hit the rails of the Intercolonial Railway from June 9 to July 4, 1914, taking the message of better farming to many parts of the province. Mr. Newton's report of the trip is fascinating in the "modernness" of the approach used.

"From June 9th to July 4th a "Better Farming Special" was run over the lines of the Intercolonial Railway. This is a form of extension work in agricultural education, and is designed to bring instruction and demonstration almost to the farmer's door. As usual, the railway company were very willing to cooperate in the work. They furnished three coaches, and free transportation for coaches and staff. An itinerary was arranged so that the coaches could be picked up and carried from point to point upon the regular trains, with a stop-over at each place of from one-half to one full day.

Equipment — The first car contained an exhibit of good livestock, including dairy and beef cattle, sheep, swine and poultry. The second car contained a wide range of demonstration materials, poultry appliances and feed, farm dairy apparatus, field grains, grasses and clovers, underdrainage and fertilizer exhibits, and bee-keeping equipment; including a colony of live bees under glass. The third car was a combination sleeper and baggage car so provided accommodation for the staff as well as space for a splendid exhibit covering horticulture, weeds, insects and plant diseases. Charts were freely used in connection with all exhibits.

Itinerary — Leaving Fredericton, the train travelled east and north, making the following stops: Cross Creek, Boiestown, Doaktown, Blackville, Chatham, Newcastle, Bathurst and Campbellton; then south, stopping at Charlo, Rogersville, Harcourt, Moncton, Shediac, Memramcook, Dorchester, Sackville, and Port Elgin. The next visit was to Chipman on the National Transcontinental Railway, after which the coaches returned to Moncton and proceeded to St. John, with stops at Salisbury, Petitcodiac, Penobsquis, Sussex, Norton, Hampton, and Rothesay.

Plan of Work — The work had three principal phases—explanation of exhibits to visitors in the coaches; morning or afternoon lectures and demonstrations in the open air or in the waiting rooms of stations, and evening lectures illustrated with lantern slides in public halls of the places visited. For instance, at Doaktown, where the train stopped for a full day, the instructors spent the morning in explaining exhibits. In the afternoon at 3:15 o'clock a meeting was held in the ladies' waiting room, with butter making and poultry raising as the subjects, while at the same hour a lecture on orcharding was given in the men's waiting room. At 4 p.m. a demonstration in laying off a field for drainage was held outside. In this particular case no evening lecture was given. Another feature worthy of special mention was the talks on Nature Study to school children, both in the car and in the schools of the places visited, given by Mr. Wm. McIntosh, Curator of the Natural History Museum, St. John."

1914 was also a year of immigration, with 1235 settlers arriving, and work being done in England to encourage more farmers to come to the province. The superintendent of immigration, James Gilchrist, observed that New Brunswick was being "outshuffled" in Britain by Ontario and the western provinces who had better literature and advertising for potential settlers at the time.

In 1911, an historic event occurred that would help change the rural society of New Brunswick for the better. The wife of an M.L.A. for Victoria County would put her mark on the establishment of an organization for rural women that would grow beyond all expectations.

Mrs. James E. Porter often accompanied her politician-husband as he made the rounds of his constituency by horse and buggy. The women had no vote and were discouraged from discussions on politics . . . a man's subject in those days.

Mrs. Porter talked with the farm women and her heart went out to them. Many were lonely and felt isolated in society. She wanted to help them and "bring some cheerfulness and encouragement into their lives."

While on a visit to Ontario, where her husband purchased seed grains, Mrs. Porter learned of the benefits of the Women's Institute that was founded in 1897. An invitation was extended to Institute Leaders in the Ontario Department of Agriculture to come to New Brunswick to acquaint the farmers and their wives with the work of the organization.

As a result of a visit by two representatives from Ontario 19 members enrolled for the first New Brunswick Women's Institute at Andover and Mrs. Porter was the first president. The women immediately went to work pressing for civic improvements and helping obtain needed materials for the local school. Other institutes followed with Center Nappan organized only two weeks after the June 12, 1911 founding at Andover.

Although without the vote, the rural women were not without influence. By 1913 they had persuaded the Department of Agriculture to appoint Miss Hazel Winter of Fredericton as the first Superintendant of N.B. Women's Institutes.

By 1914, the departmental report showed the three-year old Institute with 61 branches and over 1900 members. In spite of prejudice against women becoming involved in the community . . . some were classed with the suffragette movement in England and the U.S.A. . . . the work went on with particular emphasis on self improvement, leadership development and community service.

"When the women make up their minds to do a thing, they generally accomplish what they want done", wrote Miss Winter in 1913. The Great War years which began in 1914 probably demonstrated that better than any other early accomplishment.

$16,285 was raised for the war effort, including relief for the homeless, hospitals for soliders and sailors, the Red Cross, and patriotic organizations. By 1916, 26,182 knitted articles were sent to soldiers in the field. $2,000 was contributed for a field ambulance and 114 boxes of food were sent from the province to aid the suffering Belgian population.

The Institute matured quickly. An assistant to the superintendant was soon required, and home canning promotions showed good results.

By 1918, in response to interest from Acadian women, a French speaking section was formed under Mlle. Alice Michaud, and the provincial government, in 1923, passed a formal Act of the Legislature to give status to the movement.

The Women's Institute history, showing the progress of the first fifty years, is well worth reading. Written by Marianne Grey Otty, it shows what can be done with a good idea and willing people.

Butter making during World War I

"I was married on August the second, 1916. Married a farmer. His farm was located in Knoxford and he grew potatoes and grain and had a large herd of cattle. He was farming about three hundred acres but a lot of that was woodland. He lived there four years and farmed and then we decided to sell and moved near the station in Florenceville where we would be able to sell our produce without going so far.

I remember one of my chores was to make butter. We had quite a few cows, ten or eleven and I used to make butter about three times a week in the summer. You'd milk the cows morning and night and you separated milk from cream morning and night. We had separators and they had this big bowl that you poured the milk in. You had a strainer pail and you strained your milk into this big bowl and then that cream was put in a large cream kettle and it would sour and when your cream kettle was full you'd churn that. You'd use a swing churn that was like a big barrel shape and it would swing over and over as you stepped on a peddle and pulled the handle. Your churn would go round and round and you could tell when the butter can because it would plop. It would be a very different sound when the butter came. Then you'd drain the buttermilk off and pour cold water in the churn onto the butter that was left in there and you'd take up the butter into a tray with a ladle and work the water and milk out and put salt on your butter. You'd put a cup of salt or so according to the amount you had and work that salt into your butter, then you let it set for awhile and then take it and work it again. Let it set where it was cool, usually take it down in the basement. We all had swinging shelves in our basement to set things on, you see, before we had refrigerators. You'd have to print the butter with a wooden print to sell it. The print was a square shape and you'd fill it with butter and it had a handle to pack it right down. The print had little grooves in it on each side and when you'd print the butter it would leave the print in those grooves, then you'd wrap the butter in paper that you bought. That's the way you had to sell it, in pound prints. There were poor buttermakers and good buttermakers. Sometimes butter didn't have salt in it and sometimes the buttermilk wasn't worked out of it enough, it wasn't worked enough. It was quite a job to work those big trays of butter I know that. In 1916 I'd get twenty-five cents a pound maybe, sometimes didn't even get that. During the war period it did come up, in 1918. Things came up high then, potatoes and butter and eggs."

From an interview with Mrs. Gladys Trafford by Marilyn Kavers in 1982.

The W.I. in New Denmark,

"The Women's Institute was started in 1914 and I joined then and I'm still a member. We had a Mrs. Porter from Perth-Andover who came up to organize it in 1914 and I think we were twenty-six members that joined then. We had a schoolteacher up here, Mrs. Peter L. Hansen, she was our first president and she was a wonderful president and a very active member in the W.I. There wasn't too much going on at that time, not too many organizations, people didn't go as much as they do today. During the first World War we sent a lot of boxes overseas to the boys from here that were gone over there. We sent mostly food and we always put in a pair of home knit wool socks, the boys liked them you know. And we did a lot for the schools at that time. You know each district had their own school and we put books in the library and we looked after a lot of the elderly people, went to see them and sent them boxes. Oh, the Institute I feel has been quite an asset to New Denmark and it still is active."

"I can always remember my mother was quite a hardworking woman because in those days they had to carry their water and she carried the water quite a little ways. She did all the washing and she helped with the milking. A lot of the women they helped with the farm work outside in the fields, helping with certain things you know, especially the milking and looking after the pigs and the hens. Mother was always very busy at Christmas. They always butchered a week or two before Christmas and she made headcheese and sausage and liver loaf. When we had butchered a couple of pigs, why mother had food enough almost for all winter. They made use of everything. They were all voery good cooks that came over from Denmark. I had four sisters and mother made all our dresses, all our clothes, and we'd come home from school and our mittens would be wet and our socks would be wet and to get everything dried and the next morning to get all the lunches put up, why I don't know how mother ever did it. I don't think she got to bed very often before twelve o'clock. And all the washing, all the bedding for many years she just used a washboard and made her own soap for many years. I can always remember mother on Sundays. She always changed her dress and put on a clean apron, she always wore an apron, I can hardly remember her being in the house without an apron on. Mother didn't get out very much, at Christmas and maybe at Easter they had a few friends that they would visit, but mother was most always at home. She was a very strong person and she made all the decisions about the house, groceries and so on, my father let her decide all that."

Mrs. Singe (Madsen) Larsen was interviewed in 1982 by Marilyn Kavers.

Mrs. James E. Porter, founder of the Women's Institute in New Brunswick (Courtesy N.B.W.I.).

The Women's Institute branch of the Department of Agriculture changed to the Home Economics Branch in 1943, but a close liaison was still maintained and continues today.

The Home Economics Branch was renamed the Food and Nutrition Branch in 1982, to reflect its new role in product promotion, nutrition and enriching rural life in the province. Through vigorous efforts over the years, school lunch programs, better budgeting for homemakers, and the promotion of leadership for farm women, this Branch has had an impact on the rural and urban populations of New Brunswick.

The provincial government realized that more settlement of the province was necessary to provide a steady market for locally produced goods and to supply the growing export industry. In 1912, a Farm Settlement Board was created to buy abandoned farms and attract new settlers for them. This board, the forerunner of the Farm Adjustment Board of today, could also make time payment arrangements to the new farmers.

The demand for food, hay and grain for the war effort proved very beneficial for farmers in New Brunswick. They had a ready market for their crops and a rising value placed on them by the law of supply and demand.

But the war had an adverse effect as well. Many young men left the farms for the battlefields and the industries needed to support the armies in the conflict. The loss of this labour . . . New Brunswick always had a lack of labour from the time of the Loyalist farmers . . . meant the loss of increased production at the time.

The First World War was responsible for the move of the potato industry to the Upper St. John River Valley.

The farmers in Maine had plunged into potato growing as soon as a railroad opened up the New England market to them. Their counterparts in Carleton and Victoria Counties, just across the international border, had watched this growth and started to expand their production as well with Maine technology. Although storage facilities were rudimentary at the time, the farmer who could keep a part of his crop until the early spring made a good dollar on it.

1914 potato prices were low and farmers cut back on planting the following year. Part of the problem was labour scarcity. One Carleton County farmer recalled, for a local historian doing work in Woodstock, that a horse-drawn hoe was used to open the drill, the seed pieces were planted by hand and another horse-drawn hoe made the mound of earth over the seed. The only fertilizer used was manure.

By the end of the potato market season in 1915, potatoes were selling for over $3 a barrel. The crop had been estimated at 8.4 million bushels.

New Brunswick generously donated a large quantity of potatoes to England at the beginning of the war to help feed the army and also made a gift to the Belgian government, whose war-torn country was suffering from a lack of food.

This generosity was tarnished by what later became known as the "Patriotic Potato Scandal". A Commission of Inquiry report in 1919 found the government's handling of the whole affair "unfair and unjust".

The report of James McQueen, the commissioner who conducted the inquiry after a public outcry over the rumors going around at the time, found a loss of "at least $32,861 by the province."

The report related the purchase of barrels from a company in Saint John at 32.5 cents each . . . with a 2.5 cent rebate to the middleman in the deal . . . and attempts made to trace the movement of some of the potatoes. Some went to Cuba, but there were other sales as well. The government never got the money.

The demand for butter, cheese, grains and potatoes as well as meat, fish, lumber and other resources of the province during the war created the good times that allowed expansion of the economic base. By 1918, for instance, New Brunswick grew over 9 million bushels of potatoes. Victoria County led the way with 1.4 million bushels of production, but Carleton and Westmorland both broke the million mark as well. Gloucester was just under the million figure.

A federal-provincial agriculture conference in Ottawa in 1917, found the food situation in Europe "so serious that very urgent appeals were received for increased and immediate shipments of wheat, fats and sugar". Spurred by this market opportunity, the provincial authorities enlisted the aid of the local county councils to distribute better seed, encouraged hog production where possible, and tried to increase production on the existing farms.

The move worked. Wheat acreage jumped in 1918 to 49,453 acres from 15,331 the previous year. Oat production increased to 224,442 acres from 190,914 the year before.

As a forerunner of the 4-H movement swine clubs were organized in 1918 for youngsters. Poultry was encouraged by a department program that gave boys and girls eggs to hatch at home from top producing flocks in the U.S.A., and Ontario. The Agricultural Societies were working hard to inform and educate their members and the school programs, including school gardens, were flourishing.

The government had a loan program to help encourage sheep production . . . about 150,000 head were on farms in the province . . . and other livestock improvements through quality breeding stock incentives were being used.

Potatoes had an excellent reputation on world markets when exported from New Brunswick, but during the late 1920's protectionism had sprung up everywhere. The barriers, in the form of tariffs, slowed trade and hit New Brunswick farmers very hard. The Caribbean was particularly vicious in enforcing the tariff on potatoes and Cuba erected a $5 tariff for every 220 pounds shipped there. This effectively eliminated the market.

School gardens, home garden plots, swine and chicken clubs helped the youth of New Brunswick develop an appreciation of agriculture in the days before the 4H movement became popular.

Commercial fertilizers had appeared on the market and the Agricultural Societies played a role in securing these products at a good price for farmers by bulk-buying.

New Brunswick grew 8.3 percent of Canada's potato acreage in 1929, but through the efficiency of the producers, accounted for 12.8 percent of the yield. In that year, the crop was worth $8.2 million to the farmers.

It was during that year that the first starch factory, using potatoes, opened at Hartland. The problem was competition from corn and tapioca starches and the potato-using company could not afford to pay more than 50 cents a barrel for the culls and unmarketable potatoes in order to break even. Although in glut years, this was not a problem, it was uncertain business and the three factories that opened in New Brunswick never had it easy. One still remains in production today.

Vegetable production grew in importance in the province during the 1920's with canneries at Saint John and Woodstock doing vegetables and fruit. The move by the big companies in Ontario, where the supply of product was larger, killed the smaller ones. Blueberries were canned at Tracadie but that, too, was doomed to die out until fifty years later when freezing became possible.

The Dominion Livestock Commissioner, in his report for 1928, found 51,713 horses, 109,068 milch cows, 106,085 other cattle, 160,514 sheep, 76,072 swine and 996,218 poultry in New Brunswick.

Beef cattle were not plentiful enough in the province to fill the demand for meat, and imports were still high. A Maritime Marketing Board, run by beef producers, had been established and the price for beef improved through the efforts of the board.

Swine production was on the increase. A report at the time said that: "further development in the hog industry and also in dairying is contingent upon increased grain production and the adjustment of hog feed and management to include a more general use of grain feeds and the by-products of the dairy industry."

Apple production was down to 22,000 barrels in 1928 with a good market demand in Montreal. Proper packing for the market was urged on all growers, and spraying on a regular schedule recommended to produce unblemished fruit.

The N.B. Apple Exchange, organized by the 270 member N.B. Fruit Growers Association, was aiding the industry through promotion and better marketing. Some orchards needed renovation and new varieties to be competitive.

The staff of the Department of Agriculture in 1918 had increased to 21 members and the first extension worker, who was known as a District representative, had been appointed for Moncton. He was responsible for a huge area, and it was probably through the excellent results J.H. King got by working with the farmers that encouraged the foundation of a district agriculturist service for the entire province.

The war ended in late 1918. The shattered economy of Europe and the disruption of its agricultural production system would mean a good market for New Brunswick for a few years to come. The untrustworthy potato fooled a lot of producers in 1919 by dropping from a price that reached $10 a barrel the year before to less than 50 cents. This cycle of prices for the potato would become a matter of concern for years to come.

"How are you going to keep them down on the farm after they have seen Paree" run the words of an old end-of-the-war vaudeville song. It had a lot of truth in regard to what was actually happening on the farm.

The war spurred technology forward. The motor car was on the scene. Industry was beginning to mass-produce consumer goods. Electricity was coming in, and the exciting new thing called aviation had cut its teeth. The boys who left the farm came home as men looking for the new life Canada was offering in a growing economy.

Although a Soldiers Land Act permitted returnees a good opportunity to get their own farmland, it was not used as much as the backers of the scheme believed it would be. Here in New Brunswick, the infant pulp and paper industry was offering steady income and regular hours that never existed on the farms. The car and truck required skilled mechanics and the trades were becoming more organized, more complicated and more profitable.

The early farm implement manufacturing by small local concerns often combined a blacksmith shop with a machine and carpentry shop to produce the implements needed. These employed a few men and did not look far afield for sales. The threshing machines produced by the Connell Brothers at Woodstock, was a good example.

But the demand for larger machines for the prairie grain industry meant big business was on the way. Ontario became the manufacturing centre and a huge steel industry was off and running there. The jobs attracted hundreds of farm boys. Others felt the lure of the growing United States and industry in Connecticut profited at the expense of New Brunswick farms.

It was the era of the flappers and the Charleston, but those things affected the farmers of New Brunswick little. Granted, a few enterprising farmers along the U.S.-New Brunswick border supplemented their incomes by helping smuggle alcohol into the parched-dry United States during the days of Prohibition, but it was a risky business that didn't last.

Amid frustrations with the cyclical potato industry, the first meeting of the New Brunswick Seed Potato Growers' Association was held in Fredericton in 1925 and A.D. McCain of Florenceville was elected the first president. A seed potato selling pool had been instituted the previous November and the March-April prices for seed of Irish Cobbler variety was $1.45 a barrel.

The association sent samples to dealers in Maine, New York, New Jersey, and the western Canadian provinces to promote seed business. Visits by producers were made to several potato areas in the United States. This was the beginning of promotion for New Brunswick seed. Visitors were brought from Long Island to view growing fields here.

The last few years of the decade saw New Brunswick agriculture beginning to take in stride the industrial changes that had taken place. Machinery was more common on the farm. A few tractors had appeared. The push was still on to attract more settlers from Europe and, in 1928, 161 new farms were started in the Blue Bell area of Victoria County. There was still a lot of good land available, particularly near St. Quentin and in most of the older settled area, farms that had been given up earlier were being purchased.

Under a new government program, any British boy with the necessary farming experience, by coming to New Brunswick, and by working on a farm and saving up $500, could apply for a 20 year loan of $2,500 at 5 percent interest to purchase a farm, stock and implements to begin his career.

Another fact was emerging from the 1928 figures. In Gloucester County alone, acreage under cultivation had dropped from over 60,000 in 1921 to 37,800 acres . Charlotte County and Kent County were both showing declining crop acreage while Kings, Queens and Westmorland Counties were increasing.

Wheat growing had declined drastically. Less than one third the production was recorded of twenty years earlier and agriculturalists were worried. Problems with disease and a short season were partly to blame in the days before pesticides, but it was uneconomic to produce the grain in competition with the west.

Part of the problem with potato culture was insects and fungus diseases. Although spraying was recommended using the "Bordeaux" mixture and other substances, many farmers were slow to pick up on the increased yields that would result. With prices generally low during the period it wasn't much use to have a larger crop.

Drummond about 1920.

"In the winter, I would say in February, we'd go to the river and cut ice. We had a sled with horses and we'd go and cut a hole in the ice with an axe and start from there. We used a special saw something like a cross-saw for cutting wood but much wider and larger. When we were moving the ice the water would stay level with it. The water was helping to bring the piece of ice out because it was floating. We would build a special shed for the ice, the wall was full of sawdust so the heat couldn't go through. We'd pile ice all close together, snug together and buried up with sawdust. Couple of feet of sawdust all around top, bottom and it was lasting all summer. In the summer we'd put in butter, cream, milk, stuff like that and sometimes meat would keep a few days. Sometimes the ice was sixteen or eighteen inches thick and about the same width. All the same size to pile better. The closer they were the better.

The year I was fourteen (1924) there was a big forest fire. The whole area for many miles maybe one hundred miles burned. It was in August and it was a hot summer with lots of thunderstorms. We had just got done with the hay, I remember that. The fire started not very far from here and if I remember it was started by lightning. It burned for two or three weeks, something like that. It was terrible. Everything was black black, very hard to see. All you could see for maybe twenty miles was a black smoke and at night a big flame lighting the sky. Some days it was very windy and hot temperatures in the nineties all the time, all the time. It was terrible to see. Acres and acres of woods burning. Like the whole earth was on fire. Everybody went to fight the fire, everybody had to go. Only women and children at home. Men came from everywhere. We took all the men we could use. They were staying four or five days and coming back tired, I remember that. And some had burns. Sometimes the fire was jumping a mile at a time and would start up in another place. All they had was a shovel and an axe and earth. There was no water because there was no hose, no pump, nothing at the time. Everybody in the community was praying. There were lots praying in the church but people were praying everywhere. There was woods all around so the fire could start next to your house. I was so afraid that I couldn't sleep. I was afraid it might turn back and come to our house and I was afraid to burn. I don't think I was the only one like that, most people were like that. At the end we had some rain and that stopped the fire I guess and if I remember no houses burned, maybe a few but very few.

I had nightmares about fire for years and years. I was afraid. I had some not too long ago."

From an interview with Edgar Theriault by Marilyn Kavers in 1982.

The economic conditions that looked so favorable in 1928 began to evaporate in 1929. By October, a catastrophy hit the stock market in New York and the ensuing panic reverberated throughout the world for the next decade. Although the immediate effects were not felt by New Brunswick farmers, it wasn't long before the grim realities virtually stopped the agricultural progress being made.

The farmer who owned his land, didn't owe money, and had his woodlot for fuel, was luckier than most. The grinding halt of the North American industrial complex of the day spelled the loss of markets for agricultural production.

The forestry industry halted and more labour was available for the farms, but with the cash returns going down it wasn't required. Men were willing to work for "keep" and a system of barter or trade was developing in the rural areas.

One observer found the low yields of potatoes and other crops attributable to the inability of farmers to buy fertilizer or lime for their fields. More and more families were forced to grow big gardens to supply much of their food, since the breadwinner had no pay cheque coming home from the industrial job that had looked so attractive only a few years before.

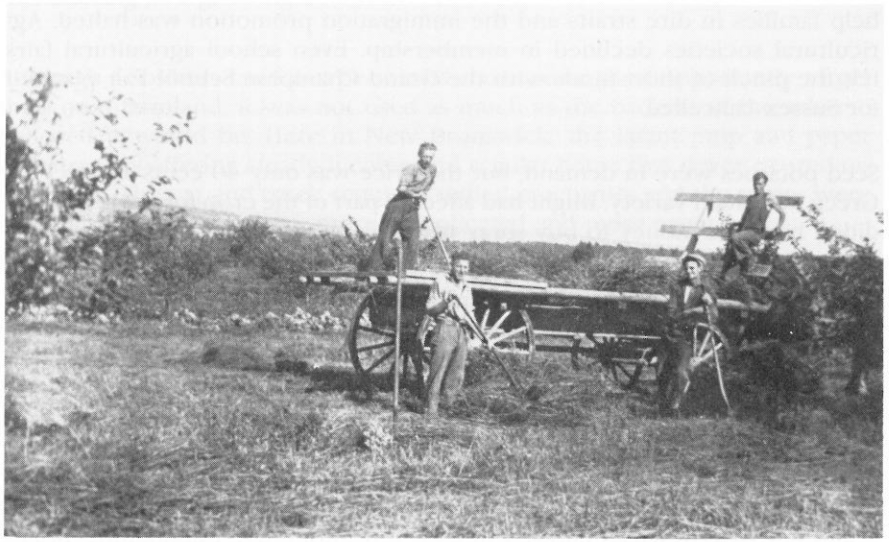
The demand on all levels of government left little for programs other than relief. The Women's Institute was very active in providing what it could to help families in dire straits and the immigration promotion was halted. Agricultural societies declined in membership. Even school agricultural fairs felt the pinch of short funds with the Grand Champion School Fair planned for Sussex cancelled.

Seed potatoes were in demand, but the price was only 40 cents a barrel for Green Mountain variety. Blight had affected part of the crop for some farmers didn't have the money to buy spray materials.

The Farm Settlement Board reported difficulty by farmers in meeting their payments on loans, due to the poor economy and low return for agricultural crops. New settlers intending to come to New Brunswick had to have $1,000 cash with them before the Board would consider their request.

There was real poverty on the farms. The books on the Depression years are filled with accounts of the sons who left home to leave more food for the other family members. Old skills had to be brought back into use. Gasoline could not be purchased without money, nor could new implements. Prices dropped to pre-war lows but articles still filled the warehouses for lack of buyers.

A familiar sight on rivers and lakes in New Brunswick before electric refrigerators came along was ice cutting crews. The ice was stored in icehouses and covered with sawdust to keep through the summer. (N.B. Museum).



Before the days of pressure sprayers, hand pumps were used to spray New Brunswick orchards. (Heather Jones Collection).

The provincial Legislature believed some relief programs were necessary to assist farmers hit by low market returns. Bonuses were implements for land clearing, along with a seed grain purchase scheme. Against the barriers of increased tariffs in the U.S.A., and other markets for New Brunswick crops, these had little effect.

Provincial producers looked to Ontario and Quebec for markets. These shipments depressed low prices in those provinces and everyone suffered, with pennies offered for a barrel of the best quality spuds.

The farm woodlot, long a source of extra cash for the farmer to pay the fertilizer bill if the potato prices remained low, could not produce the cash because that market did not want wood.

The Federal government proposed a scheme of "back-to-the-farm" for the seekers of relief in late 1932 and asked the provinces and municipalities to join in, with each contributing up to $200 per family toward the resettlement on farms of those in towns and cities, with no hope of jobs.

The plan seemed good on the surface, but in New Brunswick it was impossible to use effectively because municipalities were already short of funds and could not contribute their share.

The province did what it could. In the ten-year period beginning in 1932, over 4,400 families were given farms throughout the province as a form of relief. To those dragged down by poverty and seeing their families deprived, the farm looked like a very good answer indeed.

The largest of the new settlements opened for unemployed workers was in Gloucester County. Today, the Village of Allardville exists because of pressure from the Gloucester County Council and the clergy of the area to get the land surveyed into 100-acre farms for the people who wanted to return to the land to get off the welfare rolls and produce their own food.

The would-be settlers had no money for implements, livestock, or even a shelter and rudimentary furnishings. Most lacked the $12 needed for an application fee.

Edmund Poirier, in his Masters Thesis at the University of New Brunswick in 1974, found the 70-plus Allardville settlers tried to meet the grant conditions for their land, but it took them many years because they had no money and little opportunity to make any during the bleak first few years.

The provincial government distributed seed included potatoes, grains and vegetables that cost less than $10 per farm unit. There was a food distribution, worth about $6, of basic requirements for the settlers and the county gave about $12 average per month in direct relief at the start.

Raising Potatoes in Carleton County

"Father farmed there and did a little more extensive farming than grandfather. Father developed potato raising and was quite a prominent farmer in the community at that time. He believed in raising the best type of potatoes and he was very interested in what was known in the early days as the Florida Seed Test which is you sent your potatoes, you picked out a bunch of potatoes and sent them to Florida where they grew them and as the season was much different than in New Brunswick, those potatoes would be grown and mature and they could tell if they had any disease in them. That would all take place and the report came back before the snow went off on our farm and they could tell if they had good potatoes to plant. Father was always quite a promoter of the Agricultural Society and that was one of their things that they promoted and he always believed in using the best of seed and raising a good crop and he was one that tended it very well.

They did things different than now. They had all pretty well single row machines and I remember the potato planter which was quite an ingenious machine of that day. It would put in the fertilizer and would make the drill and it would also sow the seed and two men run that thing. One man sat on in front and looked after putting the fertilizer in and driving the horses up the field so the rows would be even and straight and there would be a man on behind who would what is known as "pick the planter". Now in order to pick the planter there was a wheel that went around and pickers brought the potatoes into that wheel and sometimes the spokes of the wheel wouldn't have any potatoes in it and sometimes they would have two or three. It was the job of that man on behind to pick any seed out of there and only leave one seed in each of the spokes and if there wasn't any in it, why to put a seed in. They went around and dropped the seed about for or five inches apart and it was all done automatically. Cultivating was the same way. It was usually single row and you'd use what is known as horse shoes, that would hill up the potatoes. When it came to spraying I remember on small plots we used to go out and pick potato bugs and put them in cans in order to destroy them but when they got to raising larger fields, maybe six or eight acres or more, they'd have a kind of a sprayer. It was a wet thing that had a mixture of vitrol which was a solution you put in that turned out like a blue solution and they'd always put some poison in it which was to kill the bugs and they would put that in the sprayer and fill it up with water and go up and down the rows, maybe four rows at a time, and spray them to kill the bugs. That's all they used spraying for and when the potatoes finally matured why they would dig them with a single row digger and you'd pick up the potatoes with a basket and put them in barrels and there'd be a team come along and the one that was picking usually had to help the man on the wagon to load the barrels. That was all done by hand and you loaded the barrels and took them into the house because that was their storage under the house and they would put them in through the cellar windows with sluices and they had to be quite careful so they wouldn't bruise them. Father was very careful about that because he knew that if a potato was bruised and used badly it would be a loss. Later on as we began to raise more crops somewheres in the order of forty or fifty acres, we built a potato house and it would hold a lot of potatoes. Very seldom did they sell any potatoes in the fall, they usually kept them right through the winter and they'd start selling in the winter.

I remember father had three pairs of horses and he did all the work with that and there was a day come that he bought a tractor and I think there was just one other tractor in all Simonds when he bought one. He said it was a great thing to have a tractor because in his opinion harrowing in that day was a killer on horses and he said we'll use the tractor only for harrowing. He said we're going to use horses for everything else because a tractor doesn't use hay and oats and that's one thing we have is hay and oats. Father played it quite close all right but I guess he made money.

In the nineteen twenties the spruce budworm made its showing which I guess it had done a decade before and it went through and killed a great deal of the spruce and fir. Father felt that he should do something to save the woods so he bought himself a lathe mill and he and a man from Hartland went into partnership so they could saw lather from this spruce and fir that was killed by the budworm. Lathe was used in that day to seal up inside houses so you could plaster the walls. Anyway, the neighbors cut their logs and brought them into the mill and it was quite a business. The mill run mainly in the fall and winter months and they had camps out there with quite a few crews and there'd be crews in the woods and crews in the mill and that went on for several years until they pretty well cleaned up the spruce and fir that was diseased and gone."

From an interview with Gerald Shaw by Marilyn Kavers in 1982.

By 1936, when slight economic recovery was taking place world-wide, the provincial government found it could do more to help the new settlers. Wood prices began to rise and public works projects by governments helped take up the burden from the hard-pressed municipal relief organizations.

The Great Depression was gradually easing its grip. By 1938, the forest industries showed a slight improvement and provided some capital to the agricultural sector as well. This was immediately used for production improvements that soon showed results.

The Great Depression

For the people of Victoria County, the impact of the depression was severe. Even though the government tried different schemes to aid farmers, the general conditions of weather, pests and tariffs together made it difficult to eke out a living from the farms. Lumbering operations were hampered by high stumpage rates and decreased demand. The people of the county and province were dealing with something which was a whole new phenomenon. Though the area had experienced depression in the 1920's, this was far more devastating and prolonged.

Councils had to try and develop jobs for the unemployed. They used public works as a means of accomplishing this in both Victoria County and Moncton City.

Measuring the impact on a given area in New Brunswick, proves to be difficult. Research, however, shows that at the Municipal level, councils did their best to distribute to those who were in need. In Victoria County, the council used its capital to try and create employment. How badly the County suffered financially is proved by the dwindling county budget and the loss of tax money. Delinquent taxes were a problem all the way through the years of depression. In fact in 1933, some counties found it necessary to close schools because school taxes were not collected. There was just no meny to keep the schools open.

The people who lived through these years say it was the worst period they can remember. Some say even hunting wasn't good, which meant that in some cases, winter meat was missing from the table.

From a paper by Bette Hudson written in 1980 and part of the Victoria County Historical Society collection.

Events in Europe were again moving swiftly toward a collision of major powers. Germany rearmed and sought raw materials beyond her frontiers. The uneasy peace that prevailed through the early thirties shattered before the guns that opened World War II in 1939. Canada was involved only days after Britain declared war on Germany.

The coming of war ended the Depression abruptly. Many young men and women rushed to the recruiting offices, which offered a job and pay. The farms of New Brunswick again contributed heavily.

To run the war machine, food and raw materials were required. The New Brunswick farmer found his markets increasing and prices rising. Although federal government controls on prices held the levels of return below the highly cyclical rises of the previous war, it was a time when expansion was possible.

In 1940 the New Brunswick Department of Agriculture, under the Hon. A.C. Taylor, was showing healthy growth in its service capacity to farmers.

The 1917 Annual Report on Agriculture also contained the following statement regarding the establishment of a District Representative Service.

"...Agricultural endeavour under a department must be so arranged that there is a close relationship between that department and the farmers. Time and expense prohibit the carrying of a sufficiently large staff at a central point to put such an effort into effect and the system that was inaugurated in Belgium many years ago and copied by practically all of America seems to have bettwer satisfaction than any other. Agricultural representatives are placed in centres where they will be convenient to farming sections and offices are provided. These men are to give their entire time to any problems which may arise from within their districts; they are not expected to be infallible, but through their opportunities and college training they are in a position to give assistance upon many of the more difficult questions. They must, however, be practical. When a man undertakes such work, considerable time is required to become acquainted with the people and too much must not be expected for the first six months. They must, in a sense stand between the Agricultural Colleges and the farmers; must be able to interpret correctly much of the experimental work carried on and sift out the results and apply them according as local conditions will permit. Their immediate work will have much to do with livestock, field crops, and potatoes."

The roots of the Extension Service were planted two years later (1919) in Moncton where J.H. King opened the first agricultural representative's office on September 13. An office under A.C. Taylor opened November 1 at Woodstock. Mr. Taylor later changed careers to politics, and in 1940, was Minister of Agriculture.

Also on November 1, James Bremner opened the office at Chatham. These dedicated professional agriculturalists quickly gained the confidence of farmers and were instrumental in some of the progressive changes that took place.

The service became the "front line" of the department's efforts to work with farmers. By 1940, with 15 representatives, three assistants and a superintendent, the service was attempting to overcome the vestiges of the Depression and revive the seed fairs and shows essential to give the farmers a showcase for their progress.

The "ag reps" as they soon were called encouraging planned farming and instituted the first real attempts to instill in farmers the need for better management of their land and resources.

In 1940 the potato crop reached the 11.4 million bushel mark for the first time with the yield average well above the rest of Canada. Certified seed, under the inspection system begun in the 1915 crop year, showed 12,667 acres under production with a yield of 3.4 million bushels.

To control disease, eight Foundation Seed Areas were established with 104 growers involved and willing to follow the rigid sanitary rules that were imposed.

Livestock prices were strong. Encouraged by the better returns, farmers took advantage of programs to upgrade their breeding stock. The provincial veterinarian reported 1143 blood tests for "Bangs Disease", (contagious abortion) carried out.

The poultry industry was growing in importance and pullorum testing of flocks continued as the provincial laboratory. The fur industry saw fox and mink farmers receiving veterinary services to control diseases that affected production.

The dairy industry, which had been the major contributor to farmers in the province in the nineteenth century, was still an important source of funds. Thirteen cheese factories were in operation in 1940 and used about 6.7 million pounds of milk to make 626,010 pounds of cheese at a value of $85,838.

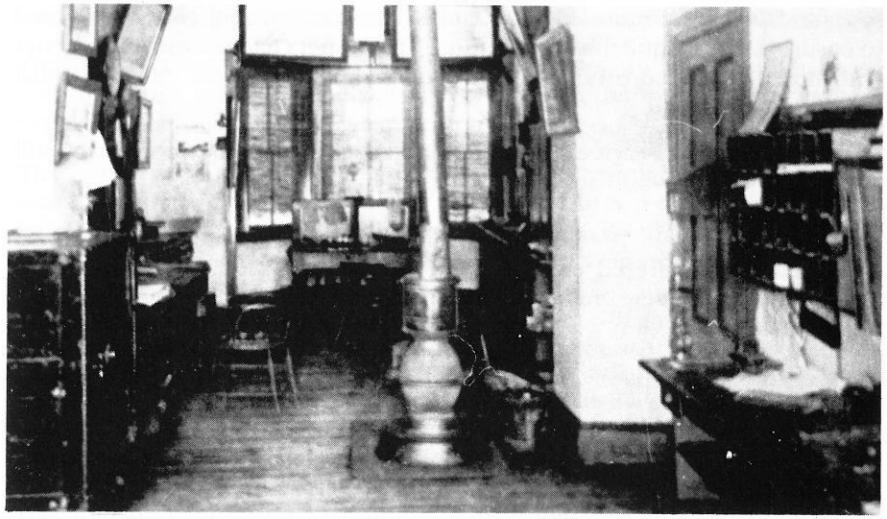
The decline of the cheese industry is attributable to the increase in the utilization of cream with a better return offered to the farmers. Cream trucks picked up the cans of cream at the farm gate for the butter and ice cream plants.

The 28 plants involved processed over 3.9 million pounds of butter and 334,869 gallons of ice cream worth over $1.3 million.

The province had a long way to go to decrease the shipments of fruit and vegetables imported from other areas in 1940. These imports totalled over 860 rail car loads through Saint John alone, and an estimated 150 carlots to various points in the province from Montreal.

The Women's Institute had 125 branches in the province and, as in the previous war, exemplary work was performed. By 1940, 4,875 pairs of socks,

The invention of a binder to cut and tie sheaves of grain saved a lot of labour on farms. (N.B. Archives)



This is believed to be the interior of the first agricultural office at Gagetown. (N.B. Museum)

405 scarves, 519 sweaters and 639 pairs of rifle mittens were knitted and shipped overseas. The Provincial Convention of the Institute voted $800 to the Minister of Finance in Ottawa toward the purchase of Bren Guns for the Canadian Army. Relief work to help refugees of the war was also a priority item.

In 1942, over a million bushels more of grain were produced than in 1940. There were also a million hundredweight of potatoes more than the year before.

The 1942 crop brought farmers over $9.5 million in sales. This increase from the $3.2 million sales of 1935 encouraged growers all over the province to get involved with the crop. Bacterial ring rot surveys were conducted by the fledgling Potato Production and Marketing Division of the Department of Agriculture. Reports indicate the seed potato business to off-shore markets was hindered by the wartime conditions which resulted in transportation shortages.

Of interest was the rapidly growing credit union movement in the province which was under the control of the Department of Agriculture. Over 18,700 persons were members of these with assets of close to half a million dollars. A Credit Union League was formed in the interest of uniformity of operation and four co-operative societies incorporated during the year to bring their total to 28.

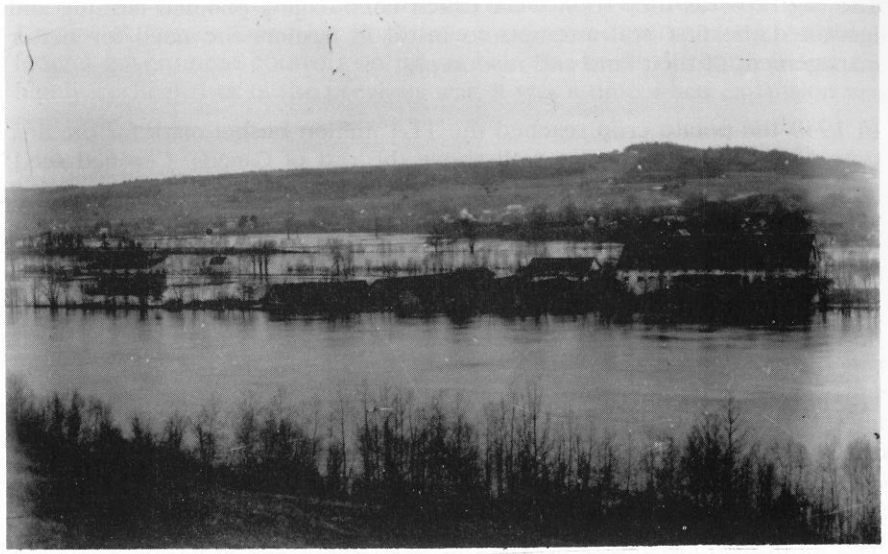
The war brought shortages to the farm and urban dweller alike. Butter, meat, sugar and flour were rationed and the nuisance of ration coupons was imposed to ensure fair and equitable distribution. The farmers had things a little better with home-produced products on the table, but there were still items that had to be purchased.

Although electrical service was common in the urban areas, most farms still had oil lamps and wood stoves in the kitchen.

The end of the war in 1945 did not see the economic slump which had been predicted. The shattered economies of Europe and the far East had to be rebuilt and there were millions of destitute and starving people to be fed. Agricultural production was to remain promising for several more years.

As with the first war, the men returning from the battlefields often sought the industrial jobs available. Another result of the Second World War was the emergence of high technology, and many of the soldiers, airmen and sailors were already trained in that. They sought out the jobs helping expand the industrial and service base of Canada while the old folks remained on the farms. This aging farm population would have dramatic results for agriculture for the next few decades.

Artificial insemination to provide superior breeding of beef and dairy cattle was a developing technology by the late 1940's, and local associations were set up to take advantage of this. It was in 1949 that the department decided to centralize the whole affair and brought Dr. Douglas Moore, a veterinarian, to Fredericton to establish the Central Artificial Breeding Co-Operative. To encourage the farmers to use artificial breeding to improve the livestock holdings, a bonus was paid to those using it.



Island Park at Woodstock was the home of a major agricultural exhibition. It is shown here at spring freshet with water covering most of the island. (Heather Jones Collection)

Spraying the orchards before the invention of the machine pump was done by hand from a wooden barrel. (Heather Jones Collection).

HANS MADSEN REMEMBERS . . .

"In them days you didn't make a whole lot of money but we made a livin'. Father went out to do carpentry, building barns and houses. We walked from here way up that road and way out the other road and then home at night. He'd have quite a little walk to get to his jobs and I think he was paid about a dollar a day. I can remember he had a little shop and I'd go down and watch him make coffins. He'd have to get the wood from the stores in town, there was no sawmills around here. He'd line the coffins with lace just as nice as the ones you'd buy. The lace is put on around the edge of the casket and he'd use real brass for the handles. At that time you'd get a coffin like that for ten dollars or fifteen dollars. In them days they didn't have an undertaker or anything like that so father generally helped to lay them out and they didn't go to no funeral home, it was all done at home. And there was a custom from the old country. A day before the funeral, you'd see each house would have a little spruce bough right by the road, everybody along the road had put out a spruce bough. The family would always have a wagon or sleigh fixed up with flowers or spruce boughs, to take them to the church and at the grave, they'd all sing the Danish Hymn "The Bell is Tolling". They still do that today."

"A barn raising was quite an event, really a big time. A farmer would send one of his boys or someone to invite people to the barn raising on such and such a day. A good turnout would be forty men or more and they'd start early in the morning and they got it all up and partly boarded in before supper. The people that had the barn all they had to do was just feed the men dinner and supper. The women would go and help with the meals, prepare and serve the meals and they would have beans, potatoes and meat, just like they'd have at home. They only had one day, they'd put the barn up and get some of it boarded in and then the man would complete it himself. Neighbors helped each other then. Didn't make any difference whether it was Irish or Scotch or French, they all got along very good."

From an interview in 1982 by Marilyn Kavers on the turn of the century at New Denmark.

Dr. Moore continued to direct the service until 1982 when he retired from the department. Over the years the service acquired modern bull barns and a laboratory, trained technicians, and developed a world-wide reputation for excellence of bulls available. It was a major success story and the foundation of the modern beef and dairy industry.

The dairy industry was in for a shock in 1949 when the Supreme Court of Canada ruled that the prohibitions in the Dairy Industry Act of Canada against the sale of oleomargarine were not legal. The provinces had to pass their own legislation to regulate the sale of this product which would compete with butter. To keep it distinctive, it could not be sold with yellow coloring incorporated and the housewife had to mix in the colour at home.

Although the book "Science and Agriculture for New Brunswick Schools" was still in use, many teachers at the junior high school level improvised on courses and taught the fundamentals of the sciences of chemistry, physics, astronomy and biology. A more general availability of magazines and newspapers, radio programmes, better library services and a little later, television, would change the expectations of the farm youth and whet their appetites for life in a different world.

1950 can be regarded as a watershed year for agriculture in New Brunswick. The horse had practically disappeared from the modern farm in favour of the tractor. The scientific side of agriculture, with soil testing and drainage, became more prevalent as farmers increased their practical knowledge of better management. Agricultural representatives were still working with Boys and Girls Clubs with success and farmer-run organizations were getting stronger.

Pork prices were down in 1950, but beef reached an all-time high. Horticultural crops were generally down in volume during the year, as were vegetables because of poor weather conditions.

The potato production figures show 1950 to be a poor year because of the weather, but still turning out 20.1 million bushels. Seed production was increasing as new varieties made their appearances on the scene, and disease control with better sprays of pesticides, was much in evidence.

Florida testing during the winter of seed potatoes began in 1945 and continued as a monitor for diseases, in addition to the field inspection service then operating in the province. Prices were continuing to be the plague of the industry with a good year followed by several poor ones. The potato production future in New Brunswick was uncertain and in need of drastic changes.

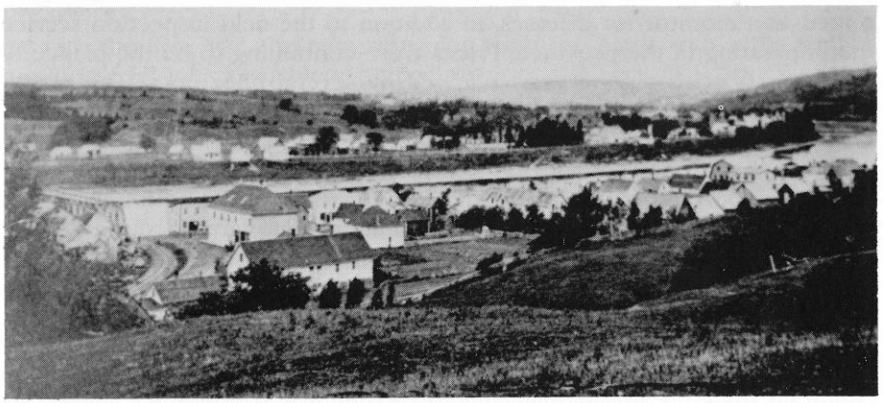
Another important branch of the department that developed following the war was the Agricultural Engineering Branch to help farmers design better structures, to seek the best in equipment, and to show how to repair it, to lay out and supervise drainage work and generally to help in farm improvements.

Although farm numbers were declining, the move toward larger units was taking up the slack that would have been shown in production. The mechanized farmer could do more work in a day that four or five with horses.

As in the case of forest products, there is an opportunity for an infinitely greater development of farm produce utilization. The war has indicated what can be done in primary farm production. It must be considered possible not only to maintain existing production levels, but to increase them. New Brunswick does not feed itself with primary food products, and most processed foods are imported. Commercial vegetable production figures indicate definite possibilities in this branch of agriculture, and it is congruous that such quantities of canned vegetables should be imported from other provinces. New Brunswick has a natural advantage in the production of certain root crops and fruits, and can compete in both the domestic and foreign markets. The local demand alone (given the necessary purchasing power) can absorb larger quantities of dairy products, and greater meat production should by no means be considered economically impossible. Farm by-product utilization is still in its infancy in New Brunswick. The possibilities inherent in potato starch and alcohol production deserve careful study.

A prosperous farm community is essential to the general economic welfare of New Brunswick, and the means of achieving this end must be the cornerstone of reconstruction planning. High levels of production must be maintained at prices consistent with production costs. The problem involves improved production methods, grading, handling and processing, as well as broadening local and other markets.

From the Report of the New Brunswick Committee on Reconstruction in 1944. (Legislative Library).



A view of Perth Andover about the end of the First World War. (N.B. Archives).

The young men who were considering farm careers wanted better knowledge of how they should go about it and 171 attended courses at agricultural schools in Edmundston, Newcastle, St. Joseph, Sussex and Woodstock. Fifty one girls took home economics courses at St. Joseph, Sussex and Woodstock.

The need for massive quantities of hay for the large horse populations in cities, until 1935, had been the basis for the farming economy of the marshlands of New Brunswick. During the late 1920's, hay from the Tantramar and other marshland areas sold for over $20 a ton. It was worth little ten years later due to the decline in the use of horse power, and as a consequence, repair work on the dykes protecting the marshes was not carried out.

In the late 1940's, agriculturalists deplored the loss of this land and the federal government enacted a Marshlands Reclamation Act in 1949 to reconstruct the dykes and upgrade them to reclaim the land. In 1950, this work was underway. 35 marsh bodies in the province with over 19,000 acres of land included were given attention.

1950 was a turning point. There were new developments coming. The next 30 years would see changes that began during these days of an emergence of a different kind of society in New Brunswick.

The old and new churches at Allardville show the progress made from the first depression era buildings constructed to get unemployed people from municipal relief rolls onto the land. (N.B. Museum)

Early potato harvest in New Brunswick

THE YEARS OF CHANGE 1950 to 1983

Events in agriculture have a habit of tumbling over each other. Following a long period of relative inactivity, a new initiative will set off a flurry of developments that result in new methods, new markets and new farmers.

The thirty year period beginning in 1950 would see these peaks and valleys of agriculture development in sharper focus than at any time since the Great Depression. Emerging from this turmoil by 1980 would be stronger farm organizations, fewer farmers but higher production on the land and a return to crops let fell by the wayside years before.

These decades are marked with increased government involvement with the farmers and the continuing "boom or bust" cycle of prices for which agricultural products are notorious. These are exciting years in some respects, but in other ways, worrisome for the farmers.

The stage for change was partially set by the massive technological advancements following the Second World War and an increased governmental involvement with the farmers.

The face of New Brunswick was changing rapidly! Construction of the Beechwood and Mactaquac power dams changed the very landscape of the St. John River Valley which had witnessed much of the early agricultural progress. Mining in the Bathurst area was coming into production, new pulp and paper mills developed and the construction of better highways saw the railway, which assisted so much in the earlier years, gradually declining to a point where its use of agriculture is almost nil.

The woodlot was important. The pulp cut in addition to the saw logs sold for lumber still added to the economics of the family farm.

Oil for furnaces with automatic thermostats was coming into use to replace the traditional wood or coal heating appliances. Electrical stoves were more common, even in the farm kitchens. A Rural Electrification Program begun in the 1940's had provided electrical service to almost every settled area of the province.

Agriculture had become marginal in parts of the province, particularly in Gloucester and Kent counties and on the Miramichi. The big production now came from the Upper St. John Valley and Kings County.

Two patterns were emerging. Farms were getting larger but there were fewer farmers and agriculturally employed people than earlier. This trend was worrying to provincial authorities and farm organizations that always advocated the concept of the "family farm" as the mainstay of agriculture. The changes being made still left the farms with the individual family but often the sons moved on to other areas of employment and farm population was left growing older with no replacements in sight.

The 1950's watched the out-migration of the youth of New Brunswick continue. Many a young man or woman left for the riches promised in the fast growing industrial areas in Ontario. The automotive industry, the steel mills, the manufacturing plants of Toronto, Hamilton and Windsor, not to mention the mining town of Sudbury drew the youth away. As one writer of the period put it, the largest export of the Maritimes "was the brains of its youth who are departing."

Stanley Wood, the director of Agricultural Societies for the Department of Agriculture, wrote in 1955 that membership in the various societies in the province was about 6,050 farmers and added that "since opportunities for remunerative employment in other fields still offers strong competition to farming it would be premature to conclude that this represents a definite turning point in the trend of agricultural interest."

He also unwittingly noted the passing of the old Agricultural Societies which had served farmers for over a hundred years. The first annual meeting of the new New Brunswick Federation of Agriculture was held and representatives no longer were elected exclusively from the societies but from farmer organizations and commodity based associations throughout the province.

One writer concluded during the early 1960's that the lack of young men starting farms or taking over the family farm would mean "no future for agriculture in New Brunswick beyond the life expectancy of the farmers now on the land."

A mood of pessimism must have run through those dedicated agriculturalists who had worked so long to help New Brunswick farmers when they read in the Federal Government Task Force Report on Agriculture in 1969 that it recommended the elimination of smaller, unprofitable farms in favor of large, efficient units and even corporate farming in Canada to provide the massive capital needed for modern, cost efficient, mechanized agriculture.

Against this backdrop of declining farm numbers and rural population, the concern growing over the voice the farmers needed with government centered mostly on the Maritime Co operative Services company and eventually Co Op Atlantic. The stage was set for the founding of a new organization within the agricultural community.

Loading Potatoes on a ship

Modern Greenhouse Production

AGRICULTURAL ORGANIZATIONS

The New Brunswick Federation of Agriculture came into being in 1952. This was envisioned as an umbrella organization for all farmers and farm associations. The need for such an organization as the Federation was stressed by key personnel in the cooperative movement and enlightened farm leaders. But the founding was not without its problems.

The opposition to the move came from well organized Agricultural Societies which could give their members strong support by mass purchasing. As Alphonse Arsenault, the first secretary of the Federation put it, the traditional reluctance of the farmers and their wariness of outsiders was instilled by years of being out of the mainstream of progress in New Brunswick.

The opposition to the new Federation was centered mostly in the south eastern part of the province. Roy Grant, an untiring advocate of more involvement by farmers in the political processes that affected them, worked hard to get the cooperation of as many farm groups as possible to create the new organization. An employee of Maritime Co-Op Services (M.C.S.), Mr. Grant saw the need for one strong central voice for farmers. The move was not to take away the rights and powers of local associations but to give them a stronger voice at the provincial and national levels.

"I observed those founding years of the federation from my position as managing editor of a French language farm paper and later as the first secretary of the Federation," Alphonse Arsenault said. "For several years before it came into being it was a resolution on the annual meetings of the Agricultural Societies and gradually they started to approve it. It looked to me as if they wanted to get an organization that was not just a commercial venture such as bulk buying of fertilizers but something for the farmers generally that would be an effective spokesman to the government", he said.

"What did it do for the farmers?" He replied: "It gave them a voice that would grow stronger throughout the years. The shortfall I guess was the inability of the Federation to attract and hold the potato growers and their organizations but I still believe that will come."

"The government started to listen to us. It wasn't overnight but they came around some. We managed to persuade them to institute a land clearing policy that paid half the cost to the farmers and some other programs as well," Mr. Arsenault said.

Alex Dan Doucet was corporate secretary at M.C.S. when he succeeded Mr. Arsenault as secretary of the Federation in 1960. He recalled the 1960's as a decade of change for the farmers and the Federation.

"Farm numbers were dropping," He said, "The Federation was concerned in some ways but not too worried about the numbers. The milk producers were very influential in the organization and were not anxious to have more producers. There were milk quotas. The cream producers were strong financial supporters of the new Federation but they were older men and gradually disappearing."

"I guess it was not very profitable to attract young farmers at the time."

Mr. Doucet said the annual brief the Federation presented to the provincial cabinet covered many topics such as the need for interest subsidy on farm loans, agricultural education and better farm management services. The government was pushing for industrialization of New Brunswick and put that ahead of agriculture in priority.

"The Federation needed full time staff and I couldn't provide that. I was only a part-time secretary," he said.

Mr. Doucet said potato growers joined the Federation as individuals but there were few organizations speaking for potato interests. He believed too many producers were also dealers and wanted to do everything themselves. It was unfortunate that potato growers could not organize effectively in the 1960's since they could have avoided problems later on.

Brussels Sprouts being harvested at Rogersville.

During the early 1970's, Mr. Doucet said federal and provincial governments were becoming involved with joint development agreements and this was of concern to the Federation. The organization wanted input into how the money for agriculture was to be spent.

"Eventually, an agreement with D.R.E.E. provided the core funding the Federation needed for full time staff," He stated. "I think things have improved a great deal in the last few years."

The Federation of Agriculture in the period beginning in 1975 became much stronger. Although the potato producers remained outside the organization, close liaison with government through policy meetings, briefs and joint studies provided a new approach to agricultural planning and development.

Through the consultative process, the Department of Agriculture and the Federation devised a new formula for interest subsidization for farm loans, better agricultural education facilities and programs to assist in land development, stock improvements and better marketing structures.

Another important organizational step for farmers in New Brunswick was the formation of new marketing boards to cover a wide variety of production.

The traditional products such as milk, eggs and apples were joined by greenhouse and bedding plants, turkeys, chickens and hogs in more organized marketing structures. With active promotion to consumers, a broader base of agriculture was possible in this province.

THE DAIRY INDUSTRY

The dairy industry, which was the backbone of agricultural income for New Brunswick in the late nineteenth and early twentieth centuries, changed rapidly after 1935. The first legislation a new "Dairy Products Commission" enforced was to control the quality of dairy products and to impose a quota system for milk supply. This ensured each producer a fair share of the available market but hindered further development of new farm operations.

The commission got into the establishment of minimum prices for milk sales at the wholesale and retail levels which it maintained until 1983. The New Brunswick Milk Marketing Board proposed the changes that were required based on a cost of production formula.

In 1954, butter set an all time production record in New Brunswick with just under nine million pounds produced, but changes were on the horizon and the small dairy farmer was soon to feel the pinch.

The dairy industry has kept pace with changing times.

By 1964, few creameries still operated on the "can" method of collection and bulk trucks to haul milk were becoming the rule rather than the exception. Modern dairy methods including milking parlors replaced hand milking and the home manufacture of butter. Refrigerated tanks were now a must to keep the milk fresh and sanitary.

The early 1960's saw fluid milk output increase but butter and cheese show a steady decline as the production of fluid milk for drinking and industrial milk for processing superceeded the farm separated cream for the butter plants. Cheese manufacturing declined since business depended on fluid milk. Today, only one cheese factory remains in operation at Sussex from the more than 70 that were once operational in the province.

The problems for the dairy farmers prompted the provincial government in 1970 to launch a Royal Commission study of the industry and in 1971 the report supported major changes in existing legislation governing it. The Dairy Products Commission received legislation for policy development, licencing, milk pricing and milk quality control.

To meet these responsibilities, the commission needed additional staff. In 1974 it had acquired a modern testing laboratory at Fredericton to analyze dairy products.

The Modern potato farm.

A modern dairy farm.

Grains are receiving new attention.

Vegetable production at Maugerville.

In 1975, legislation put milk quotas under the control of the New Brunswick Milk Marketing Board which took over the marketing and distribution of all farm produced milk to the various dairies in the province as a result of the institution of a province-wide transportation pool.

By 1978, the province had 512 milk producers and 425 cream producers supplying seven milk processing plants, five ice cream plants, four creameries and one cheese factory.

The dairy industry had gained a stability rare for agriculture in New Brunswick. This stability, with a return going to the producer based on industry wide cost of production figures helped provide the means to build modern, well-bred herds of cattle and better management systems to produce the best yields of milk.

The dairy industry in Canada was faced with a decline in milk sales in the early 1980's partly because of a slow economy . . . some referred to it as a major recession . . . and quotas across Canada were cut by seven percent. Because of the foresight by the N. B. Milk Marketing Board in holding some reserve quota, existing producers were not hit by the losses but future expansion of milk production certainly did not look promising for some time. However, established producers were in a stable position.

The 1970 period marked some major changes in the way dairymen fed their livestock. The dry-hay method was going out rapidly since unfavorable weather could cause no end problems in curing the hay properly. Silo construction was rapid in the late years of the decade and a move toward hay-grass silage using crops such as alfalfa as well as grasses took over on better farms. Corn, although used for years, was grown more frequently as new varieties did not need the heat units required by older strains to mature.

THE POTATO INDUSTRY

If there was one major influence on the development of the modern potato industry in New Brunswick, it had to be the late G.C. Cunningham. He was a pathologist at the Federal Department of Agriculture laboratory at Fredericton from 1914 to 1923 and encouraged potato growers to organize and to improve their seed for better results.

His efforts helped found the New Brunswick Potato Growers' Association to encourage better cultural practices for the industry.

In 1915 a seed potato certification system was established after seed shipped to the United States was found to be infected with powdery scab disease. Potatoes shipped to Bermuda were also not producing good crops due to virus diseases.

Strawberries are a delicious treat.

The harvest of New Brunswick apples.

Cunningham trained the first seed inspectors and by 1920 about 3,000 acres were certified in the Maritimes. In 1923 the F.W. Pirie company of Grand Falls shipped the first seed potatoes to Cuba beginning a business extending to the present day.

When Cunningham resigned from the federal service in 1923, the organization he founded became dormant and in 1924 the N.B. Seed Potato Growers Association was incorporated. It lasted until 1934 when it too passed into history.

During the poor market years of the Depression, an Eastern Canada Potato Marketing Board was established by Ottawa. The 1934 crop of 80 million bushels of potatoes in Canada pushed prices lower than the cost of shipping to market and left nothing for the growers.

Mr. Cunningham was appointed export committee chairman and the board established artificial prices for domestic potatoes but success was not forthcoming. There was no information available on possible export markets and no commercial contacts. By July, 1935, the Board folded and attempts were being made in new discussions in the early 1980's for a similar board as another cure for the ailing Potato industry.

Mr. Cunningham returned to New Brunswick to head the potato program for the Department of Agriculture in 1935 and was instrumental in forming a policy on potato export development. He made several trips to South America and opened up new markets for New Brunswick seed. In 1936 a total of 99,000 hundredweights were shipped to Argentina. The exports left the domestic market healthier and produced better prices for growers.

Between 1937 and 1940 six seed potato exporters joined together under the "N.B. Traders Limited" organization to promote seed sales in South America and in 1938 the shippers were joined by producers in the "Associated Potato Growers and Shippers of New Brunswick".

I.S. McArthur, an economist with the Federal Department of Agriculture studied the economics of potato production in New Brunswick. His report in 1937 found tariff protectionism in many countries virtually eliminating the sale of potatoes grown in New Brunswick.

He proved that potato prices had fallen more than other prices during the Great Depression, with sales in New Brunswick at 25 cents a barrel in 1931, and well below the dollar mark for the six year period beginning in 1930.

He concluded that unless markets could be developed and satisfactory producer discipline established to prevent glut years, the price would often go below the cost of production.

McArthur's report appears to have been little read or understood for the problems he identified continued and were still, to some extent, unresolved in the early 1980's.

The provincial government passed the Potato Industry Act in 1939 to establish foundation and certified seed growing areas in the province to improve disease control. These lasted for a few years but eventually vanished due in part to a lack of return to producers for the extra work required.

A New Brunswick Potato Export Corporation was set up in 1939 and ceased to function in 1945. A Potato Growers' Council was formed the same year and lasted until it too disbanded in 1950.

The N.B. Potato Shippers' Association was formed in 1948 to push for better rail transport rates through the Maritimes Transportation Commission. It was successful in getting a better rate to Quebec and Ontario and this organization has continued more or less throughout the years. For many of those years, it has been the only voice "crying in the wilderness" for better potato marketing according to many long-time observers of the New Brunswick potato industry.

The N.B. Potato Producers' Marketing Board operated in 1950 but literally lost its shirt on the disastrous market for the 1953 crop and became inactive. It was revived briefly a few years later but the losses it suffered built in a barrier of mistrust for the board. It disappeared in 1960.

A revamped Potato Industry Act in 1961 gave the Minister of Agriculture the power to organize the various parts of the potato industry to form a joint committee to oversee the entire industry. It died in the protests of the newly formed N.B. District of the National Farmers' Union at Perth-Andover before the 1960's were over. The main concern was representation and control of the organization proposed.

During the 1970's renewed steps were taken to bring some organization to the total industry. The Western and Northwestern New Brunswick Potato Agencies formed but had little power and were soon facing the same fate as their predecessors.

In the spring of 1979, the situation was serious and required steps that would put in place an effective organizational structure. Agriculture Minister Malcolm MacLeod, announced to the Legislature the imposition of the New Brunswick Potato Agency and named a board of directors. It was not universally accepted by all producers. One section calling for the registration of producers led to a court fight in 1982 which eventually found the Agency was a legal body with powers to carry out its mandate in promotion, organization and grower support programs.

THE HOME ECONOMIST'S WORK

by Mrs. Elsie Roberts.

"There was a strong desire to hold a 4H Girls Camp in 1943 and with the approval of my director I went to the Deputy Minister of Agriculture, Mr. J. K. King to discuss it with him. About 80 girls were to be involved.

Mr. King expressed to me his good wishes for a successful camp and promised $100 to help out. I must say I was grateful for his permission to make the dream come true.

Money was earned or donated in each of our clubs to sponsor the chosen delegate. Camp Wegesegum near Chipman was our camp site. Late in August after the C.G.I.T. program ended we rented all of their facilities which included a small lodge, a few cabins for the camp leaders and army tents for the 4H members.

On arrival on opening day we were busy checking supplies and greeting arrivals. Then we found all of the ticks empty. Alma Weldon and I went to the nearest farm and asked for straw then filled the ticks and returned to camp.

A very happy and beneficial camp was conducted for the first time in N.B. for 4H girls.

In 1944 another camp was conducted in spite of the fact that on opening day forest fires in the area caused many late arrivals. Some arrived by truck in the middle of the night as the trains were not permitted to go through the fire area."

(The years of the Second World War were busy ones for the Home Economists in the department)

"The home canning method of food preservation for fruits, vegetables and fish was introduced to the Women's Institute in the early 1940's. A very enthusiastic response was noted and many home canning machines were purchased at that time.

In the office we packed many tea boxes with good used clothing for overseas during the war.

Sugar was rationed also and recipes using a small amount of sugar or a substitute were sent out in newsletters or to radio stations. We also emphasized made over clothing and food dehydration during those years.

A cookbook was compiled in 1945 for the brides arriving in New Brunswick from overseas. Alma Weldon and I did the compiling from tested basic recipes submitted from members of the Womens' Institutes and friends. Special attention was given to including conversion tables from weights to measures and to the use of New Brunswick products."

Another major piece of legislation in 1978 was the Potato Disease Eradication Act. This gave New Brunswick the legislated basis for disease control and eradication and helped put a new face on the seed potato industry. It was regarded as the toughest legislation of its kind in North America and has helped improve the image of N.B. grown seed worldwide.

This legislation made the setting up of restricted seed growing area at Glassville possible.

Although the listing of the various organizational attempts and legislative moves in the potato industry is somewhat repetitious, it is necessary to understand them to make sense out of the potato situation developing in the 1980's.

The founding of McCain Foods Limited to process frozen french fries from the crop of New Brunswick potatoes was looked on with some misgivings by the banking community. There was little to recommend the operation. Frozen potato products were just beginning to be manufactured in the United States and the obstacles seemed insurmountable.

Two of the sons of the late Mr. A. D. McCain, Robert and Andrew were operating the McCain Produce Company he had founded in the 1920's. The other two sons, Harrison and Wallace had found jobs with the Irving group of companies and gained an appreciation of how the world of big business operated. In 1956, they resigned their middle management positions and came home to Florenceville to build on their dream. It was risky and it was thought impossible but they believed in their plans.

The original plant built in 1956 has been swallowed up by the expansion that took place later. At the official opening in January of 1957, the McCain family probably had a better understanding of where they were going than the provincial government and even they would have been overwhelmed to have foreseen the success of the industry they launched. The forty employees of the original french fry plant were happy to be employed in 1957 and the potato farmers were certainly interested in another outlet for their crop.

Typically, the "Maritime phenomenon" took hold. "It is impossible for Maritimers to succeed and if they do, they must be doing something dishonourable and morally wrong!" We Maritimers like nothing better than to put down the efforts of our own in favor of those from somewhere else. We seem to relish on failure and expect the worst to happen.

The McCain story is one of the best in New Brunswick agriculture from the standpoint of how a good idea can be grasped at the right time and built upon. The frozen food market was small in 1957 but it grew to become a major factor in the grocery business within a very few years as convenience foods and working wives found each other in the 1960's.

The McCain company built a second major plant at Grand Falls in the early 1970's and expanded to plants in Western Canada, the United States, Europe and Australia. Their first product, french fries, still holds a prominent place in the business but expansion has included a wide variety of snack foods, vegetabless, desserts, pizzas and more recently frozen juice concentrates.

That old problem, the New Brunswick potato industry's lack of markets drew attention in 1959-60 from a Royal Commission charged with making a wide variety of probes on which to form recommendations on planting, cultivation, pest control, harvesting, storage, processing, grading, marketing and market promotion.

Hugh Whelan of Fredericton chaired the commission with Fred Hatfield, Mrs. Harry Kilpatrick, Earl Christensen and Emile King as members. H. Raymond Scovil was secretary.

In the preface to the report the commission pulled no punches.

"The Commission wishes to place on record its belief that complacency under existing conditions could prove to be disastrous. It simply cannot be assumed that the future of the New Brunswick Potato Industry is certain and assured. Throughout North America, in fact, the production, marketing and utilization of the potato crop are in the the throes of a veritable revolution. The Commission wishes particularly to discourage the notion that the mere possession of a superb soil resource and a cool climate will, by themselves, guarantee the future prosperity and development of the Industry. The world is not so simple. Potatoes can be grown commercially over vast areas of Canada, and recent experience shows that given the appropriate economic environment, large scale farm operations and technological innovations can disrupt severely the traditional geographic distribution of potato culture. Indeed, with the growing competition from other producing areas, changes in merchandizing methods and the upsurge of potato processing in Western Canada, substantial thought and rationally directed effort will be required in the years immediately ahead if the New Brunswick Potato Industry is to retain its present position in the markets of Eastern Canada."

The inquiry found overproduction and the smallness of potato farms contributing to high costs of production to the detriment of the farmers. The survey done found 538 farmers in Victoria County during 1959 growing potatoes at an average cost of $233 per acre. Only 3.7 percent had over 100 acres under cultivation.

The modern potato harvester.

Swine

Egg Production

The report said the quality of N.B. grown seed was falling and few farmers were willing to put the effort into producing certified or better seed for prices that were little better than for tablestock sales.

The Royal Commission expected to find some problems but were not prepared at the beginning to acknowledge the fact it did in the final report that the New Brunswick potato industry had made "very little overall progress" since World War II.

The long list of recommendations proposed by the commission relegated specific roles to both provincial and federal governments and to potato producer associations. It urged the immediate organization of the industry for its future development. More extension work and better cultivation, a better way to provide the extensive short term capital required and better land management were priorities.

It urged a provincially run seed potato farm to produce the top quality seed required by commercial growers in the province and storage, inspection, better grading and packing were prominent recommendations presented to the provincial government.

Although attempts at industry organization along the lines of the report were stymied by producers reluctant to follow the pattern laid out, eventually they would be forced to participate in a program similar to what was recommended two decades earlier.

THE RESTRUCTURING of GOVERNMENT

The 1960's held some surprises in store for New Brunswick! A new era would emerge in the social, education and economic fields that would change the province drastically.

Observers of the period invariably referred to the "North Shore" . . . Gloucester and Restigouche Counties . . . as depressed areas and usually Kent County was lumped in there as well. Farming had declined to a very basic subsistence level in these areas with the few productive farms the exception rather than the rule. The breadbaskets of New Brunswick in 1900 were now less than holding their own. The tax revenues split between the province and the county councils caused great inequities in education and social programs which at the time were designated as "welfare".

Gus MacDonald, associate editor of the Moncton Times and a veteran observer of the political scene in New Brunswick from a newspaper viewpoint for the last quarter century, has dubbed the changes of the last half of the 1960's as the "Robichaud Renaissance" of New Brunswick.

Based on the "Byrne Report" on taxation in the province, the planners under Premier Louis Robichaud between 1960 and 1965 put together a package of programs known as "Equal Opportunity" to change the political reality in New Brunswick. County councils . . . those 15 mini-governments . . . were abolished along with the county school finance boards.

All taxation on property in the province was on the same system. Gone were the days when the more well to do could afford better schools and teachers for their children. Teachers were to be paid the same across the province. New facilities were to be provided where the need existed. Programs provided by the government applied to every resident, not just the few who could afford them. Equally important, the 40 percent Francophone population in the province was recognized as an integral part of the population on equal footing with the English population and government services from central coffers of tax dollars were to be applied equally across New Brunswick.

For the farmers, the change meant a good deal. For the first time taxation applied universally across the province and for the first time, government programs could be used by everyone. New Brunswick had come of age in a real sense and it represented the first major revamping of the political structure in over a hundred years.

As the 1960's waned into the history books, there was no massive signs of change but the undercurrents were there. The federal authorities and the provincial officials were talking about joint programs to assist rural development and increase the role of agriculture in the provincial economy.

The Department of Agriculture had made progress during the 1960's toward establishing the Bon Accord Elite Seed Farm in the hills of Victoria County. This facility would produce the disease-free stocks of seed that were sold at production cost to growers to replicate for sale to other farmers or off-shore markets.

Another important purchase was a small nursery at Hoyt to become a center for the production of disease-free strawberry plants for that industry in the province. This nursery would eventually produce cloned blueberry plants, test shrubs and flowers for the nursery trade and experiment with vegetable production and fiddleheads.

Both of these facilities would surpass earlier expectations of their value to the producers of New Brunswick.

Farming, as such, had not held its own with other facets of the Canadian economy from 1951 to 1967. Farm prices had risen only 6 percent during the period while the costs of farm operation had gone up over 25 percent. More efficient, mechanized farms were producing more agricultural production than all the small farms together but the income was dropping and future progress looked bleak in view of the lack of capital for new land, machinery or buildings.

N.B. Potato Fields

Provincial government grants to agriculture for improvement work had a long established history. The Federal government was also providing some funding but it was clear the larger money reservoir in Ottawa would have to be tapped to provide the funds needed for any major overhaul.

As early as 1948, the federal government helped bail out hard hit potato farmers under a new Agricultural Products Stabilization Act.

A new growth industry developed in the 1950's. Consultants and experts began turning out "socio-economic" reports proving that a massive flow of capital and a radical change in approach was needed if the "family farm" was to survive.

Many of the reports contained good material while others were self-justifying and useless.

FEDERAL-PROVINCIAL AGREEMENTS

1961 marked the passage of the Agricultural Rehabilitation Act in Ottawa. This first major federal-provincial program was designed to find alternate land uses, promote soil and water conservation, rural development, retraining and "research" to help overcome low income in rural areas.

Throughout its life, the program would have success and failures because of its broad-brush nature but it did spawn a variety of other programs such as special area agreements and the Department of Regional Economic Expansion to alleviate rural poverty and provide the injection of money to help the depressed economic regions of Canada join the mainstream of prosperity that Ontario had become.

The ARDA program had a 50/50 federal-provincial cost sharing formula and a joint management committee to administer its projects.

Although ARDA covered all areas of the provincial economy, agriculture was not given as much attention as it deserved. Principally, since the program had to be evaluated in terms of the benefits it generated for the dollars spent, nearly sixty percent of the farms in New Brunswick did not qualify for assistance.

They could not be classed as "commercial operations" and could not qualify for funded programs. The feeling that these would somehow be phased out of existence was ever near the surface in some official thinking of the time.

The problems of ARDA as revealed by later analysis was the antiquated thinking of government and the use of historic concepts which had been outdistanced by the modern world. The two previous programs the federal government had sponsored, the Prairie Farm Rehabilitation Act and the Maritime Marshlands Rehabilitation Act, which did affect New Brunswick, were aimed at utilizing a physical resource and not oriented toward the income of farmers.

By the early 1970's, ARDA money was going toward resource development and little really found its way to help alleviate rural poverty or help rural people develop an adequate income and social structure.

In some cases, ARDA bought out marginal or "poverty farms" and helped the former occupants find jobs elsewhere. The farm consolidation projects attempted to establish larger, commercially viable units and this is where the assistance was going.

ARDA was an experiment in New Brunswick and laid the foundations for later programs that would be more effective for individuals. It had all the growing pains of any new program for human and economic resource development.

The ARDA project applied across New Brunswick but special areas were established for intensive efforts and these were in Northeastern New Brunswick and Kent County. Another federal-provincial agreement hit the scene at this time and was called F.R.E.D. . . . the Fund for Regional Economic Development.

From the community development work carried out and the vast amount of paper generated by studies, reports and evaluations, the provincial government was getting a better understanding of what New Brunswick had become and where it should be heading.

Spring planting in New Brunswick.

Blueberries are growing in importance as a cash crop.

Some of the vegetables produced on N.B. farms.

Using new plastic mulch technology.

Floral culture

Dyke protection and land forming are increasing the crop potential on the marshlands of New Brunswick.

In fairness to the men and women who worked hard with ARDA and the offshoot agencies it created, the program had successes and failures but there were sins of misinterpretation and some misunderstanding of the situation developing. It was the first major federal invasion into provincial jurisdiction but it was done by consent and mutual agreement.

ARDA probably succeeded in establishing the concept that in enterprises such as farming, some government assistance was essential for the future.

As with all government projects, there were problems and flare-ups that developed. It was as one writer put it a few years later, "a learning process". The good intentions of many often were overshadowed by the opportunistic dealings of a few and criticism became more common than praise.

To add to the problems in Kent County, a massive new National Park was established at Kouchibouquac that dislocated many small farmers. The massive Mactaquac power development had done the same north of Fredericton and helped decrease the agricultural output of the area.

During the early 1970's the government of New Brunswick approached DREE for a cost shared agreement to help develop agriculture. There were a lot of documents available to support the case but no comprehensive overview of agriculture or what its future could be. The first Agriculture Sub-Agreement (ASA I) would provide the funds for that study and some other projects as well.

The creation of the Department of Regional Economic Expansion by Ottawa to oversee all of the development programs in depressed areas added another twist to the saga but at the same time made for clear lines of communication for the province. DREE as it was called would be responsible for millions of dollars in joint federal-provincial programs during its lifetime.

In Kent County, DREE and the province established "Project Newstart" to help alleviate the depressed economy there. Although many of the old faults of ARDA were incorporated with a mass of studies and reports required, money was spent on developing some agricultural impetus. Some of the projects such as rabbit raising would eventually falter but the rudiments of a vegetable industry would catch hold and grow. Tobacco farming was established a few years before in Kent County in the only area of New Brunswick found suitable for that crop. A few farmers still grow about 500 acres a year.

On October 8, 1974, the provincial cabinet announced the Agricultural Resources Study and appointed Arthur Parks to chair it. It was viewed at the time with the old pessimism of government studies as "possibly another form of procrastination" but as Parks set up his team and format of the study, it became clear that this study would be different.

Land drainage works

The study group had a big task. The overall objective was summed up as: "to find ways to promote the fullest use of agricultural resources in such a way as to maximize farm income, to strengthen the vitality of the family farm, to encourage new job creation in food processing industries and to increase food production."

Parks brought to the study a highly active mind and a skill for getting the job done. He had apparently looked at the past attempts to rationalize agriculture in the province and decided early on that the agricultural community had to participate in the study and agree with its results to make the recommendations work.

During 1975, he formed a competent staff of professionals and began a round of meetings with farmers and their organizations for the establishment of a base to work from during the public hearings which would follow. Briefs were received but more importantly, the Task Force talked to hundreds of people in agriculture and visited farms and agricultural projects to actually get the "grassroots" information required.

In the late spring of 1977, the massive report was ready. It ran to over 1000 pages and each page was supported by approximately 10 pages of background materials. It was tabled in the Legislature.

The findings stated that the department of Agriculture must be decentralized to provide regional emphasis and take advantage of regional thinking; the department had to be reorganized to emphasize marketing, production and farmer support services and more bilingual staff was required to serve all farmers of the province.

From the farmers' viewpoint, they required stronger organizations, marketing boards and a strong single voice to give the government their views on policies and programs affecting their future.

Human resources had to be developed for agriculture through educational programs and strong farm management had to be incorporated to ensure maximum utilization of the resources available to them.

A program of technology transfer to give provincial farmers the advantage of using the most modern methods and equipment was recommended along with a better credit system for farmers and a land use policy that would provide the incentive required to keep good agricultural land from being gobbled up by non-agricultural users.

The recommendations went on and on . . . crop insurance to protect farmers from the elements of nature, better planning for farm structures, more emphasis on marketing at the local level as well as outside the province, better transportation arrangements and more emphasis on processing. A new emphasis on horticulture, field crops and livestock production were urged.

The report stressed the need for the development of strong rural community organizations and leadership.

The provincial government liked the report and immediately accepted its recommendations in principle but were faced with the task of finding a massive supply of money to inject into agriculture to implement the findings.

Armed with a strategic plan based on the results of the study, the province was again at DREE's door and came away with the Agricultural Resources Development Agreement in late 1978. It contained nearly $35 million of 80/20 cost-shared funds for a five year program to improve agriculture in New Brunswick.

How the Agricultural Resource Development Agreement succeeded will have to await appraisal at a later time. The termination of the federal provincial agreement on March 31, 1983, will affect the amount of funds the department has available to help farmers. Evaluations will take some time to complete and the long range impact will probably not be known for at least a decade.

But the early indications are that the program did have a major impact on agriculture at a time when it was at the crossroads and needed a good, strong kick to get it moving again.

An important factor was the willingness of various producers commodity groups to sit down with the specialists within the department to jointly develop strategies for the various commodities. That consultation process fostered a spirit of cooperation and a desire to see things work better.

The Agreement had several components based on the recommendations of the Agricultural Resources Study Report. By far the best known of these was the Farm Development Program.

Under this program assistance could be provided farmers in acquiring the capital investment needed to increase farm income.

A five-year plan had to be developed showing just what benefits new capital would have for the farm's production and thus the farmer's income. The plan, worked out with the District Agriculturist and Farm Management Specialists, was a blueprint the farmer would work from in improving his operation.

Basically, a farmer was eligible for a one-time grant of up to $25,000 from the agreement funds if he used it to cover up to one quarter of the cost of capital investment laid out in his plan. This included new or expanded facilities, land development or stock improvement.

The program succeeded beyond the expectations of the planners. More funds than originally allocated had to be found from other sectors of the agreement to serve the more than 1600 applicants. The largest part of the money went to this program. It required over $16 million to carry out but resulted in on farm capital investment in five years of over $60 million.

FRANK BOYER, DISTRICT AGRICULTURALIST

"When I joinned the department in 1945 after completing an agriculture degree at McGill, we were still working with small producers in most areas. My first job was an an assistant district agriculturalist at the Moncton office. Those first five years were probably more learning than teaching for me.

In 1950, the D.A. in Andover was transferred and I was offered the post with a promotion. I had no intention of staying here all this time. In fact, my boss at the time said it would not be permanent but I got involved in the community and the years slipped by.

You ask about the changes over the last 38 years? There have been good changes for the farmers but some bad changes as well. Farmers today have a better lifestyle in the material sense. They have modern homes with modern conveniences and they can travel for vacations like everyone else. In that sense things have changed for the better but it was at a big price.

The thing that has been lost is the rural community spirit and the fellowship they once had with their neighbours in their own areas. I believe they were just as happy as the farmers today and certainly had a lot fewer financial worries.

When I came here in 1950, I had 1100 farmers to serve. Now, that is down to around 250. I watched the farms get bigger over the years and go from a $10,000 capital investment to over $200,000 investments in many cases. At the time this area is growing virtually the same amount of potatoes but on bigger units.

The potato farmer now has four times the investment, four times the liabilities, four times the headache and is still getting roughly the same relative price as twenty years ago. The relative position of the farmer has not really changed.

To understand the change completely you have to realize that 20 years ago the farmer was more diversified. If potato prices were poor he had a smaller acreage and could go to the woodlot to pay the bills. Now, the stakes are too high for that.

From an interview with the author. Frank Boyer retired in late 1982 after 38 years service with the Department.

The Technology Transfer program urged in the Parks Report was implemented and was successful. Many projects were tried and some proved so successful that commercial application was almost immediate. The use of plastic mulch to encourage earlier maturity in vegetable crops for the consumer market is an example. Other projects introduced new varieties, better methods of pest control, new grain production techniques, especially the winter varieties. The list is a long one and detailed reports are available on each project.

The Human Resource factor was carefully examined and special programs established to help producers acquire new skills and methods of production by visiting other production areas.

Numerous short courses were provided. A two-year technology program in Agriculture established at Grand Falls, Woodstock and Bathurst. Agriculture familiarization programs were also instituted in some of the secondary schools of the province.

In agricultural education, it appears the wheel had gone full circle in just about a hundred years!

The creation of a Market Development Branch for the department with the funds from the agreement to promote N.B. Grown products marked the first time that a concerted effort in conjunction with producer groups was undertaken. A logo was developed, advertising intensely carried out, new markets sought out and developed, trials run conducted to determine where New Brunswick farmers could penetrate markets with products they could produce.

Equally as important, studies conducted confirmed there were potential markets that could be served and steps were taken to encourage production in that direction. Vegetables, small fruit, apples, potatoes and meats were all given consideration.

Potato market development deserves special attention. Through a Quality Seed Potato Program, New Brunswick went to off-shore markets and worked with growers to show them the worth of N.B. grown seed. There was follow up and with the efforts of Potatoes Canada, the decline in off-shore sales appeared to be arrested and some improvement occurring.

The grain industry had fallen into disarray in New Brunswick because it was uneconomical to produce it here with the preferential freight rates available to western producers. Changing times, fluctuating prices and the need for a secure supply for the livestock and poultry industry in the province gave the impetus under the agreement to the construction of drying and storing facilities and to land development work to make the crop more productive. Low prices still hamper the producer but this is changing slowly.

The department reorganization followed the Parks Report somewhat. Regional centers were created at Wicklow, Grand Falls, Bathurst, Chatham, Moncton and Sussex to serve the farmers on a different basis than before. Each region has an advisory committee of farmers who provide the input on the programs needed to handle regional needs and concerns.

It would be too much to expect the development agreement to solve all of the problems, but it did go a long way toward revitalizing agriculture. Its effect were felt in the Women's Institute which got its first provincial office outside the department and by the 4-H movement which received a new perspective.

Computers are being used more readily on farms as management tools.

(Photo by Phil Brannon)

The biennial Farm Mechanization Show in Moncton.

(Photo by Phil Brannon)

A 4H Camp

The near depression conditions that hit New Brunswick along with all the world in the 1980's slowed down the rapid development of the farms taking place just before that time. The returns to producers were hit at the same time he had to pay interest rates at all time levels.

Although programs such as the Farm Adjustment Board's loan policies and a new interest structure that ensured farmers could borrow money required at below the bank costs helped some, it was necessary for direct government help to be given to keep the beef breeding herds intact during several years of depressed prices and the province also had to put additional funds on loan to the hog stabilization program to keep prices in line with production costs for producers.

In early 1982, the Department of Agriculture prepared a ten-year strategy for the development of the industry in the post Agricultural Resources Agreement days. The summary of that document explains the situation nicely.

"The Agricultural industry ranks third among the primary industries in New Brunswick in its contribution to real Gross Domestic Product, estimated to be $34 million in 1981. The preliminary estimates for 1981 indicate that farm cash receipts have surpassed the $200 million level reaching $204.5 million. This is up $49.8 million over 1980 figures."

"In 1980, there were 3,700 farms in New Brunswick encompassing a total farm land area of 763,000 acres. The total value of farm capital invested in Agriculture in the Province was $511.0 million, representing an average value per farm of $138,200. Gross value of production for these farms was $211.0 million. Gross income was reported at $153.0 million with a realized net income of $38.0 million. The Agricultural labour force has remained fairly constant and in 1980 was estimated at approximately 6,000. The labour force resulting from Agricultural activity in the food processing and transportation sectors is estimated at an additional 18,000 jobs."

Basic structural changes had occurred in the Province's agricultural sector over the past two decades. A gradual consolidation of farm land had taken place. There has been an increase in the number of commercial farms and the industry is now characterized by larger and more efficient, specialized operations.

Productivity has been increasing steadily on New Brunswick farms. Volume of production per farm has increased significantly over the past decade.

The three major commodities traditionally produced are potatoes, dairy products and cattle and calves. The gross value of production for these commodities was $65.8 million, $35.2 million, and $25.3 million, respectively, in 1980, accounting for 59% of the total value of production for the industry in that year. In recent years, the dairy sector has been increasing in relative importance to potatoes as a contributor to farm cash receipts.

Quoting from the Strategy fro the 1980's:

"The goal of the Province's agriculture sector strategy, is to ensure the continued growth and development of a viable industry throughout the six agricultural regions of the Province, that will maximize its contribution to the total provincial economy.

The objectives designed to achieve this broad aim are two-fold:

— to increase and stabilize income and employment in the agricultural industry; and
— to provide assistance and incentives to the rural community to encourage self development.

The objectives of the Department are very broad and all-encompassing by necessity, given the complex and dynamic environment in which the sector is evolving both in the Province and in the country."

History is left to decide how well this will succeed for the future of Agriculture in New Brunswick.

THE AGRICULTURAL RESOURCES STUDY

"If there was one factor that made the Agricultural Resources Study (A.R.S.) successful it was the tremendous co-operation and input the Task Force I chaired received from farmers, their organizations, agri-business and government officials. We had the benefit of the combined thinking of hundreds of people along with the studies on economics and other factors carried out by specialists.

The synthesis of the whole process of public hearings, briefs, studies and reports formed the basis of the report which presented recommendations for immediate as well as long term development in the agricultural sector of the economy.

We found a lot of frustration in the agricultural community during the 1975 and 1976 round of hearings but more importantly we found optimism and the desire to get moving on the part of the farmers. They had needs in mind that if satisfied, could create the atmosphere essential to new growth. The recommendations the Task Force made were based on those needs, not some vague historical perspectives or preconceived ideas.

The four key elements of the recommendations can be summed up as the need for a better marketing structure to encourage new production, new technology to increase productivity, incentives to promote farm development and better services to support the farm operators. Although they look simple on paper, each of those areas contains a multitude of problems that had to be solved as quickly as possible to maintain a viable agricultural base in this province.

It has been gratifying to me to see the most of the recommendations we made carried out over the last five years. Although some of the recommendations were altered to meet changing circumstances as they should have been, overall the framework recommended has proved beneficial to developing a better base for the farmers.

From an interview by the author with Arthur Parks, chairman of the Agricultural Resources Study.

THE FOUNDING OF THE FEDERATION.

"The New Brunswick Federation of Agriculture didn't happen overnight," Alphonse Arsenault said. "It took several years and a lot of effort by some dedicated people to bring it about."

As the first secretary of the Federation, Mr. Arsenault was in a position to observe the beginnings.

"I was editor of "Le Fermier Acadian, a monthly for French farmers published by L'Evangeline in 1951 when I was approached to take on the job of secretary to the new Federation. The salary was split and the expenses were divided so it was a part time job," he said.

"The big push for a federation came from Roy Grant and others in Co Op Atlantic. There was opposition because some of the agricultural societies thought it was replacing them which was not the case. The federation was the umbrella to work for all farmers and the societies still could carry out commercial ventures such as bulk buying of fertilizers and seed," he said.

"There were some good reasons for the farmers reluctance to join the Federation of Agriculture back then. The farmer has a traditional independence and he had been fooled so much in the past that he suspected everyone and everything that came along. It took a lot of hard work to convince him differently."

"I think we set up a pretty strong organization with local, regional and provincial basis. We also belonged to the Maritime and national organization and developed a good voice with government for the farmers.

The Federation was the first real bringing together of farm groups in New Brunswick. There were some very good men involved in the work. I remember Lloyd Sloat, Gus Schousboe, Percy Mitton and Gus Riordon as some of the strong proponents of the Federation. They gave me a lot of support," he said.

"Looking back, I think we put the Federation on a pretty strong footing and it grew to a place of importance because of the early work," Mr. Arsenault said.

from an interview with the Author in March 1983.

Mr. Douglas Moore

Livestock breeders in New Brunswick can pinpoint where a lot of the credit for improvements in cattle over the last 30 years has to go. Invariably they name Dr. Douglas Moore as the man responsible.

For 33 years he headed the New Brunswick Artificial Breeders Co-Operative in Fredericton and developed it into one of the top facilities in the world.

"I graduated from the Ontario Veterinary College in 1945 and came to New Brunswick as a district veterinarian in Chatham. In 1949 after a stay in Moncton I was asked to come to Fredericton and establish the A.I. unit. You see, there were several local artifical insemination units in existence but they were not very effective. We needed a central unit that could serve the whole province," he said.

Until his retirement in May, 1982, he put initiative and hard work together to develop a top line of bulls to serve both the dairy and beef breeds in the province. By making available the tested, frozen semen the livestock producer has a wide choice of bulls to match to his cattle.

Dr. Moore believed in breeding efficiency in dairy cattle for top production animals and worked with farmers to ensure the unit was meeting their requirements. Prince Edward Island and Newfoundland are served by the central A.I. unit and a substantial volume of sales are made overseas each year.

Dr. Moore said the field technicians who work for the service deserve a lot of the credit for its success over the years and acceptance by the farmers.

Cattle for Malawi — New Brunswick

A well managed New Brunswick beef herd.

BON ACCORD — A special crop of potatoes that has never seen the outdoors will be harvested here this fall. It is part of a program to give New Brunswick seed potato growers the best possible stocks of elite seed to generate future crops.

"This is actually the second crop to be produced here from materials received from the provincial Tissue Culture Centre at Fredericton," specialist Dave Wattie said." The first crop was planted last December and the tubers harvested in April. Those are in a controlled storage and together with this crop will be planted in the fields next spring.

"We have 4,326 pots of potatoes growing in this greenhouse now and after about 100 days depending on the variety, the tubers will be harvested and used the next spring to rapidly bulk the next generation of seed."

The new greenhouse at Bon Accord Seed Potato Farm has 6,200 square feet of space. It is a steel post and truss structure covered with an inflated double plastic cover. The benches are on tracks and can be moved to permit the ultilization of 80 percent of the floor space. That is 20 per cent more space utilization than the conventional greenhouse. It was constructed under the Canada-New Brunswick Agriculture Resources Development Agreement.

To provide the heat required, two new furnaces were installed providing a 100 per cent backup in heating capacity. A new heavy-duty electrical system was also added to cope with the demand from 72 lights each using 1,000 watts. A backup generator is also installed to function if a power failure develops.

Melvin Barclay, the officer-in-charge of the seed farm, said the former system of using an eye-indexed tuber to produce the elite I stocks will be carried out parallel with the new system.

He said the meristem system being used has been tested and proved to work well and he expects no problems but will have the backup in place during the initial use period as a safeguard.

Wattie said the Fredericton facility uses the very tip of a growing potato sprout to get the disease-free materials to start the new plants in a highly controlled, sterile atmosphere. The tiny plantlets are divided by cuttings and grown to rooted small plantlets. These are placed in plastic containers and shipped to Bon Accord for transplanting into eight-inch pots containing pasturized peat moss. The plants are placed on benches in the greenhouse and automatically receive water and nutrients through a trickle irrigation system with a tube to each pot. The greenhouse will have a total capacity of 4,575 plants when fully operational.

All air intakes to the greenhouses are screened to prevent the entry of insects that could spread disease and access is restricted to maintain the disease-free environment.

"The varieties being propagated now are the Russett Burbank, Superior, Kennebec, Shepody, Red Pontiac and Chieftain," Wattie said. "The greenhouse plants grow to mature plants and set tubers. These are harvested and stored for field planting the next spring.

"The tubers we harvest from the greenhouse plants go to the field as pre-elite I and begin the process of moving through the flush through system we practice in this province. It permits more rapid bulking of disease-tested materials faster than ever before. This is an advantage with new varieties which took years to build up to commercial numbers.

"We try to simulate the field conditions by filling in the pots as the plants grow. We alsso cool off the greenhouse before harvest to mature the tubers. The lighting system permits us to lengthen the daylight hours and thus produce maximum growth for the plants."

FREDERICTON — Two potato varieties were crossed in the greenhouses of the Agriculture Canada Research Station here in 1967. Twelve years later, a new potato variety, called the Shepody, went to provincial growers and promises to be one of the major potato developments in this province in the last half century.

What happened in those 12 years is a story of patient, scientific detective work and careful observation.

"Many different crosses are made to select promising new varieties each year," Dr. Richard Tarn, a member of the team led by Dr. Don Young of Agriculture Canada, said. "For every new potato variety that makes it to licensing, there are literally thousands that fall by the wayside because they don't have the characteristics we are seeking. It requires a great deal of patience to produce a new variety such as Shepody."

In the spring of 1967, cross-pollination was made between the flowers of F58050, a seedling with one of the best chipping characteristics available but a very low yield, and NY No. 3, a potato developed at Cornell University. The Bake King has good appearance and quality.

Dr. Tarn said about 600 seeds were obtained as a result of the cross-pollination process and in 1968 these were grown in the greenhouse to produce seedlings and small tubers.

A small tuber harvested from each seedling was planted at the Breeding Research Farm near Alma in 1969. Each of these plants was genetically different and, at harvest, each was visually inspected for type, yield and quality.

"The best appearing tubers were selected and planted in 10 hill plots in 1970," he said. "The production from these was planted again in 1971 and judged for plant growth, tuber type and yield. The tubers were also saved for evaluation for utilization.

"What is interesting is that from the original 600 seedlings only 25 had survived the various selection processes to this time. This is about four per cent of what we started with so you can see how much work goes into producing the material all along the line.

"As the number of survivors decreases, the evaluation and testing become more intensive. Detailed records are maintained and by 1972, we had reduced the 25 survivors to only six."

At this time the variety that was to become Shepody was assigned the number F69016.

One of the tests the tubers have to pass is being placed in a drum and rotated with rocks. This provides information on the handling characteristics and whether the potato will bruise easily. At this stage laboratory tests on culinary and processing quality are conducted on the most promising selections to determine suitability.

"In 1973 test plots were grown in Prince Edward Island and Nova Scotia as well as in New Brunswick. Also in this same year, because F69016 was long and had a high specific gravity, it was french-fried for the first time. In 1974, the remaining selections were grown in larger trials in the three Maritime Provinces."

In New Brunswick these main crop trials were grown at Grand Falls and Centreville. Here the tubers were inspected for potential yield, maturity and field performance. Disease testing was also undertaken to determine the reaction of the new variety to some of the common potato diseases.

Even at this late stage, some varieties that held early promise are eliminated. However, the results from F69016 continued to look good and after the 1976 season, the information was reviewed by a regional committee to consider the total picture.

"There was little doubt at this stage that we were onto something. The scores were good and most people were impressed," Dr. Tarn said.

The variety advanced into grower trials in 1979. There were no questions on the yield or the french fry quality but it did not have an attractive top nor was there experience on how it would store in bulk.

In 1978 and 1979, the new variety was put through a number of tests by Dr. Ken Rykbost of McCain Fooods Ltd. in actual growing and handling conditions. It passed.

In 1980, F69016 was recommended to the national committee and the Canada Department of Agriculture for licensing. Shepody had gained a name and a place among the varieties that can be produced in Canada.

By this time, the potato had been virus tested and sent to the provincial elite seed farm at Bon Accord, Victoria Co., for bulking so it would be available to provincial growers.

Dell Hiscock of Northview, Victoria Co., was one of four elite seed growers in the province to receive 40 sets of the Shepody in 1980. After growing it for three years, he now has 3,000 barrels of the seed available but has found a few things which management practice will have to overcome.

He said he did not believe yields would be as high as early indications and he found the seed will have to be harvested on the small side since the tubers do not have very many eyes which develop the sprouts for new plants.

On the plus side, he found the Shepody did not require as much fertilizer as other varieties and the shorter growing season was a definite advantage over the Russet Burbank variety.

Ed Smith of Agriculture Canada, who heads the potato seed certification program in New Brunswick, has been involved for 20 years with seed potatoes. He said it was "the first time I have seen a variety take off the way Shepody had."

"In 1980 we had four hectares of seed and in 1983 there were 450 hectares harvested. That is pretty phenomenal. I know of nothing in the past to approach that. There is a great interest by the processors and a definite market immediately available."

The Shepody received a good reception in the early fresh market tests and as a table potato appears to have a good future.

Dr. Ken Rykbost of McCain Foods said Shepody was proving an excellent early and mid-season potato for processing and "expectations were very high" for its use in the next few years.

He believes it will replace the Kennebec variety now used for french fries at the beginning of the season and in the next few years could replace 40 to 50 per cent of the Russet Burbank, the present standard variety for french fries.

An unusual ten-in-hand at the Maritime Winter Fair.

SUSSEX — The small Holstein calf looked very sick. It was woefully thin and its head hung down. When it moved, it was unsteady on its feet.

The farmer was worried as Department of Agriculture veterinarian Dr. Larry Donovan began his examination. He had already lost three calves and the cost was beginning to add up. Questions about what the calf was eating, how it was fed and how it acted were answered quickly. The farmer went to the house to get a bag of the calf feed.

After reading the label carefully, Dr. Donovan made his diagnosis. The calf, in spite of being fed a high protein feed, was starving because it was too young to digest the feed. A shot of vitamins and antibiotics to help ward off infection, plus some advice to the farmer on how to feed the young calves, completed the call.

"Farmers now are better informed than they were 30 years ago when I started here," Dr. Donovan said as he drove through the rugged beauty of the hills of south-central New Brunswick. "They have better animals and feed them a balanced ration. The animals produce more as a result but are under more stress so the farmer has to be a better manager and keep his stock healthy."

Sussex, the dairy centre of the Maritimes, has one of the largest concentrations of farm animals anywhere in New Brunswick. Dr. Donovan and his three colleagues from the Sussex office of the New Brunswick Department of agriculture Veterinary Service are busy. One is always on call and another on back-up after regular office hours.

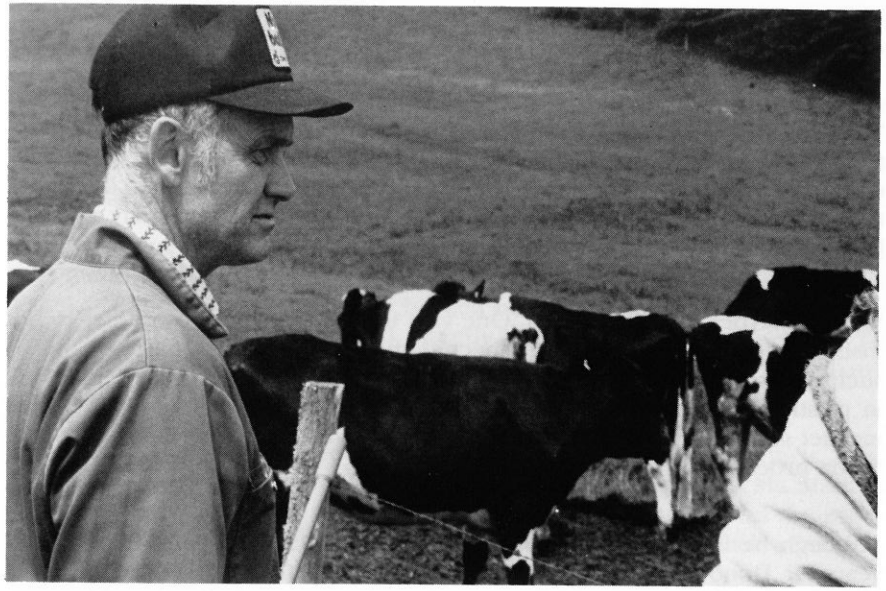
"Why did I choose to be a veterinarian?" he said in response to a question. "My father was a veterinarian in Saint John and I grew up around a dairy farm. I guess I just grew up with it and liked the work. Now, my son is in veterinary college so that will be three generations in the same line of work.

"Once in a while it isn't much fun. A cold barn at night during a difficult calving can be trying and sometimes the animals don't try very hard to cooperate but generally it is rewarding work."

The radio is the car crackled to life. The office secretary said a farmer was asking when stitches should come out of a cow that had minor surgery. Dr. Donovan answered the query ashe drove along.

"The radios are great things. We can stay in touch with the office and, in a situation like that, the farmer gets his answer immediately. He doesn't have to wait around until a vet comes in off the road or keep calling back for an answer. It has improved the service we provide."

Another farm posed a new problem. A six-month-old calf is losing weight fast and is listless. The farmer said the calf lost its mother when it was young and



the animal had become something of a pet. He was considering putting it down rather than see it suffer.

The examination was thorough. Temperature, heart and lungs were checked. Questions about feeding and activities during the last few days were asked. Then an examination was done of the hairs on the lower neck. The blue louse, a scourge of young cattle, was found. The blood-sucking insect had infected the calf. So much blood had been removed, the calf was anemic and sick.

Filling a syringe with a new drug, Dr. Donovan said the chemical worked well to clean up lice, stomach and lung worms, and mange in animals.

Although Dr. Donovan appreciates the new antibiotics and other advances in his profession, the biggest improvement is in the application of preventative medicine measures on farms today.

"We have better farm managers and have to look at the overall situation," he said during a routine visit to check a herd of dairy cattle. "With milk quotas, farmers are much more conscious of what their herd is producing. Cows should be with calf 90 days after freshening and they have to make sure the cow is healthy. In the last five years, better feed in the form of alfalfa and haylage have come on line too so milk average per cow is going up rapidly."

The vet said he advises veterinary students to learn to be good communicators.

"Another thing the new veterinarian has to learn is to look for the obvious and if that isn't the case, go for the other possibilities. I enjoy the challenge of making a diagnosis that is correct. Too often it would be easier to overlook the small things and go for more exotic things but cows are generally a pretty healthy lot and usually it is something simple that is wrong."

Simple, maybe, but still difficult. One visit to a young cow showed her to be losing weight and dopey. He suspected she had ingested a piece of metal such as wire, a can top, part of an abandoned car or a nail. A magnet enclosed in plastic was inserted into her second stomach to attract the object. The magnet stays there to hold the metal so it won't interfere with the regurgitation process.

Although he has had his share of kicks and bruises from animals over the years, Dr. Donovan treats them with respect and gentleness. He said he leaves the surgery to his younger colleagues now as he prefers the herd health work and farm visits.

"I would like to see the radio system upgraded so we could hold consultations between veterinarians around the province to gain from the experiences of each other," he said. "It is changing more all the time and consultations will be a big part of the future."

Another interesting change in veterinary medicine is the number of women entering the field. Only a few years ago, it was rare to see a woman at veterinary college, but the last few years they have outnumbered young men at most schools.

"The women make good veterinarians. Some go into large animal work. Although there was some farmer resistance at first, I think the farmers will give them the respect they deserve if they do the job well. The whole thing is to earn the respect of the farmers and keep it."

Dr. Donovan returned to his office at mid-afternoon after several farm calls and a drive of more than 100 miles. He is on call for the weekend and packs his bag with the medicines and equipment he might need.

"Farmers have to pay extra for calls after hours and on weekends so you can pretty well expect the calls that come in will be fairly serious ones," he said. "Animals are like people. They don't always get sick at convenient times for all concerned."

EPILOGUE

The Bicentennial of New Brunswick as a province in 1984 marks another step in a long and proud history. The founding stones of the province, its natural resources of the forest, farms and fishery and today, mining, have played valuable roles on which the progress of the next century will be based.

Agriculture bears little resemblance to the efforts of those early Acadian and Loyalist farmers. Times changed and methods adapted to new technologies. Problems still remain in marketing farm production at a return to the farmers that is adequate for his investment and labour but there are encouraging signs of change and new areas for expansion are opening up.

The farmers of New Brunswick have changed, too. The modern farmer is highly skilled and possessed a high degree of technical expertise. He is more involved and more concerned with his industry than ever before. The farmer is more involved in the community, widely travelled and more willing to accept change than ever before.

The economic recession of the early 1980's hit hard at primary agriculture. The elusive profit from the potato industry again escaped the growers and all his experience and new production technology could do little to protect him from the high cost of production, high operating money interest rates and lack of steady markets.

The move toward monoculture farming and crop specialization puts all the eggs in one basket today. A severe loss can spell ruin or severe handicap for years to come.

There is no crystal ball for agriculture. What the future holds is uncertain today as it was two centuries ago. But the farmers are more knowledgeable now and better able to cope with the changes.

In spite of better marketing controls, better production technology, more government involvement to help remove some of the financial problems, the farmer is still very independent and on his own to make it or to fail. Perhaps the price of this traditional independence has been too high and new approaches for the next century will have to be worked out to cope with the problems.

But food we must have! The farmer will always be important in any society and whether the space age technology can change the way it is produced or whether the land will always be required awaits the future to disclose.

Writing the story of agriculture in New Brunswick has really been a "labour of love". From roots on a family farm to watching it for the past few decades, I have learned one thing about farming . . . it requires the personal touch of dedicated people who know and love the land.

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