

It is hard to maintain competition over large areas while enthusiastically co-operating in others. Habits of mind formed in one environment cannot be sloughed off easily. The very fact that there are only two railways makes it, in certain ways, more difficult than it would otherwise be. If there were five railways all engaged in pooling in various parts of their respective territories no one need lose face by such a change; when there are only two that is impossible. That aspect of face is important, at least as important as the fact that economies through cooperation did not prove to

be as rich as they seemed at first to be.

Transportation is one part only of the national economy. If we can resolve the social tensions which kept the whole economy at subnormal levels in the 1930's and if those who are charged with the administration of transportation agencies can keep a reasonable balance between their capital outlays and the revenues reasonably to be expected, we shall get along. But there is very little to be expected from laws to protect fools from their folly and the same holds for administrative devices addressed to the same end.

Farming in Nova Scotia in the Seventeenth Century

By O. J. FIRESTONE

IN the course of some research work on early Canadian agricultural history which has recently been undertaken by the writer it became necessary to explore the question of the boundary arrangements of farms in Nova Scotia in the French period and the layout of the fields. Since no satisfactory answer could be obtained from contemporary reports and historical monographs a search was made for a map which would give more detailed information on the topic.

A good map exists for New France, as the Province of Quebec was called in the French period. This map gives a detailed description of the field system which was used by the French settlers along the St. Lawrence. The plan was prepared by Sieur Gédéon de Catalogne at the request of Monseigneur le Comte de Ponchartrain in 1709 and was drawn by Jean Baptiste Decouagne. The original map is kept in Paris while a copy is available in the Public Archives in Ottawa. In addition to the map, Catalogne prepared a minute report on the conditions of the settlements in New France entitled "On the Plans of the Seigniories and Settlements of the Govern-

ments of Quebec, Three Rivers, and Montreal" which he completed in 1712. Besides the French text, an English translation of this memorandum will be found in the Public Archives in Ottawa.¹ The original manuscript is in the Colonial Archives in Paris.

Though there exist a number of good maps for Acadia completed in the French period, none of them seemed to go into such detail as to show the field system similar to the work undertaken by Catalogne. The writer therefore undertook to search for such a map in various archives and museums. Thanks to the tireless assistance of Mr. Norman Fee of the Public Archives in Ottawa, a copy of a map was finally found which contained the desired information.

Completed in 1708, this map bears the title "Plan de la Banlieue du Fort Royal a Lacadie et de ses Environs". It gives a detailed description of the Annapolis Basin indicating not only the settlements which existed already at that time but also the shape of the farms and the arrangements of the dykes which were built as a protection against the floods.

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1. Series C 11 A, vol. 33 a.

The original of this map is kept in Paris² but a copy of it was made by Mr. Charles Boudouin in 1926 for the Public Archives in Ottawa. The designer of this map is not known though it has been established that the work was undertaken at the request of Daniel d'Auger de Subercase, the last French Governor of Acadia.

In this connection it might be of interest to discuss shortly agricultural conditions in Acadia and New France as in existence at the turn of the seventeenth century. Thanks to the courtesy of Dr. Gustave Lanctot, the Dominion Archivist, it was possible to reproduce sections of both maps: the plan of Acadia dated 1708 (map I) and Catalogne's plan of New France completed in 1709 (map II).

Map I shows Port Royal and the adjacent settlements. Villebon in his "Memoir on the Present Conditions of Port Royal—Its Situation and the Reasons for Fortifying It" described this oldest permanent settlement in Acadia with the following words: "The site and neighborhood of the old fort of Port Royal are in a very fine and pleasant situation, and there is no other place to fortify, for nothing overlooks it. The fort is on a point of land; on one side, the Port Royal River, which has no tide, turns within musket range to the east; on the other, a small river, a pistol shot in width, runs south east. The face of the fort towards the basin is steep and rises from a cliff about thirty feet in height; this is undermined each spring by the high tides which beat against a condition which could easily be remedied, as will be set forth hereafter. Very near at hand is rich soil with hardy grasses suitable for turf which could be obtained in any quantity."³

The outstanding feature of the ground cultivated in Acadia was that it consisted of marsh land which had been enclosed and drained. Dykes had been built to keep the salty water of the spring tides away from the cultivated ground. The Agricultural technique of the French in

Acadia in the seventeenth century is well described in a survey entitled "A Geographical History of Nova Scotia" from which the following quotation is taken: "The French chose this Part (Minas) to settle in for the Conveniency of the Marshes, of which there are Millions of acres hereabouts. In these Lands there was no Timber to be cleared off, no Morasses to be drained, upon a little Trail they found the Soil rich, knew it would want but little manure, and was easy of Tillage. It was observed, that they were only flooded at Spring Tides, and therefore it would be no very difficult Matter to fence out the Sea, by making it a joint-work to raise Dykes for that Purpose. These Dykes being made with dry Sods, intermixed with Marsh, grow very compact in a little Time, the Marsh serving the use of Mortar to the Sods: they are soon covered with Grass, and furnish the Farmer with Footways to his Lands. These Marshes join close up to the Verge of the Uplands, by which means they receive all the Washings from them which are brought down the Rivers every Flood. These Washings are very good manure, and help greatly to enrich the Soil, in-somuch, that the Land, with a little Labour yields fine Crops of Corn the second Year after it is drain'd and, in a few Years more, will produce both Scotch, and several other kinds of Seed Grass. Thus the Farmer is furnished with both Corn and grazing Land in the Marshes, and a small Part of Upland supplies him with Garden-Stuff. The great Disadvantage that attends Estates of this kind is very obvious and well known, I mean the Danger they are exposed to, of having their Dykes broke down as well by extraordinary and unexpected Floods, as by several other Accidents; whenever this happens the Damage is severely felt, since besides all other Losses, nothing will grow upon the Land for two or three Years after."⁴

In the French period as well as in the period after the treaty of Utrecht in 1713 when Acadia became English, numer-

2. Archives du Service Hydrographique de la Marines Paris, Portefeuille 133, Division 8, Pièce 5.

3. J. C. Webster: *Acadia at the End of the Seventeenth Century*, Saint John, New Brunswick, 1934, pp.129-130.

4. H. A. Innis: *Select Documents in Canadian Economic History 1497-1783*, Toronto, 1929, p. 189.



Map 1—Port Royal in 1708

Explanation of markings on page 157



Map 2—Quebec in 1709

ous complaints were made that the French settlers in Acadia had mostly cultivated marsh land and had neglected to clear the adjacent woodlands which were no less fertile though the cultivation of this ground required a great initial effort. Villebon wrote in 1699 that the settlers around Port Royal, "who had numerous children, established some above Minas and in the direction of Beau-bassin, for they were unwilling to clear the uplands because the work was too hard, although they are much more reliable than the marsh lands, which can be cultivated with less trouble, but are sometimes flooded when high tides are accompanied by strong winds; after such inundations the lands must be abandoned

for two years to allow time for salt to be washed out."⁵

Colonel Richard Phillips the British Governor of Acadia (1717-49) also criticized the lack of clearing the woodland in 1734. He described the French settlers in Acadia to be rather backward in their agricultural methods. "They raise (it is true) both Corn and Cattle on Marsh lands that want no clearing but they have not in almost a century clear'd the Quantity of 300 Acres of wood Land."⁶

The system of dykes is clearly recognisable on map I. The dykes are marked in the plan with thick lines next to the

5. J. C. Webster: *Acadia at the End of the Seventeenth Century*, p. 133.

6. H. A. Innis: *Select Documents in Canadian Economic History 1497-1783*, p. 188.

main river and the rivers and rivulets which water this region. Since the ground consisted of cultivated marsh land and dykes were built irregularly so as to afford the best protection against the spring tides, the fields were shaped in an irregular form, just as it was found best to cultivate them. The irregular shape of the fields is clearly recognisable on the map. This feature is one of the most distinguishing marks of the Acadian field system when comparing it with the strip system which became popular in New France.

As long as the dykes were kept in good order, the marsh lands were very fertile—even though the Acadians did not use manure. In 1699 Villebon reported that the marsh lands around Port Royal have “up to the present time, been very productive, yielding each year a quantity of grain, such as corn, wheat rye, peas and oats, not only for the maintenance of families living there but for sale and transportation to other parts of the country. Flax and hemp, also, grow extremely well, and some of the settlers of that region use only the linen, made by themselves, for domestic purposes.”⁷

It is of great interest to note from map I that farms are described by adding the names of the settlers to the word “marais” which means marsh, e.g. “marais de Bellineau”, a farm situated north of the fort. This description indicates clearly the character of the soil. A little distance north of Port Royal—the place does not appear on the section of the map published in this issue—a farm is situated, described by adding the name of the settler to the word “terre” indicating that the settler had cleared wood land. Acadians thus distinguished between fields which had formerly been marshes and those which were obtained by clearing the wooded uplands.

Settlers in New France had no extensive marshes to drain, so they went to the much harder task of clearing the territory around Quebec and later on, the wood lands along the banks of the St. Lawrence.

Map II shows Quebec in 1709 and the shape of the farms in its neighbourhood. It will be noted that all farms are of a rectangular shape and that every settler had an outlet to the river. This arrangement of farms is called a stripe system to indicate that the fields were all shaped in long and narrow stripes. The main reason for the establishment of this stripe system was the fact that in an age when good roads were an unknown luxury, the St. Lawrence was the best communication system available in this region. The river served not only the peaceful purpose of exchanging goods and communications but assisted the settlers to rally quickly to each others help in times of danger. Especially at times when England and France were at war, or when Indians were on the war path, was the river road to safety of great importance.

Sieur de Catalogne praised in his report the fertility of the soil of New France. He said that in addition to the plants which were already known to the Indians, the following kinds of grain and plants had been brought from Europe to New France: wheat, rye, barley, oats, lentils, hemp, and flax. Furthermore the following fruit trees had been introduced in New France: apple trees, pears, cherries, plums, peaches, quinces, vines and currants.

Catalogne concludes by saying that there is great abundance of agricultural produce in the country. To describe conditions vividly, he applies the proverb “Tel veaut l’homme, tel veaut la terre” which means the land is worth what man makes it by his work. He adds: “This proverb is so true that the three fourth of the peasants in Europe would die of hunger if the lands were not cultivated better there than they are here. From this I conclude that this is the best country in the world for farmers, as there is not one who is in want of good wheat bread.”⁸

The habitants, as the settlers in New France were called, were known to have been an industrious colony. They had

7. J. C. Webster: *Acadia at the End of the Seventeenth Century*, p. 128.

8. Public Archives, Ottawa, Series C II A, vol. 33 a pp. 12-13.

to work hard to clear the forests and to cultivate their fields. They loved their land and they stuck to it. Acadians were perhaps more fortunate in the beginning since the building of dykes did not require as much work as did the clearing of wooded land. They were therefore not as used to hard work as the habitants and were less industrious than their neighbours. Villebon in a "Memoir on the Settlements and Harbors from Minas at the Head of the Bay of Fundy to Cape Breton" praises the fertility of the Acadian soil by saying that the "lands are very advantageous for crops, such as wheat, rye, peas, and oats

and all sort of vegetables, which are found there in abundance." He adds: "If the people were as industrious as the Canadians, (settlers in New France) they would in a short space of time be very well off, but the majority work only when it is absolutely necessary for the maintenance of their families. As for the women, they are always busy, and most of them keep their husbands and children in serviceable linen materials and stockings which they make skillfully from the hemp they have grown and the wool produced by their sheep."⁹

9. J. C. Webster: *Acadia at the End of the Seventeenth Century*, p. 132.

EXPLANATION OF MARKINGS ON MAP 1

The following explanation is identical with the inscriptions found on the original map.

PLAN DE LA BANLIEUE DU FORT ROYAL LACADIE ET DE SES ENVIRONS

- A—Le fort.
 B—Maisons et jardins de M. de Bonaventure
 C—M. de Subercase.
 D—Grange au roi.
 E—Maisons, et terres de M. Defalaise.
 F—Maisons, et terres du sienur Descoutis.
 G—Maison du marquis de Jean Labat.
 H—Maison au sieur Cahot.
 I—Maison du sieur Pontif, chirurgien major.
 K—Maison de Lachaume Sergent.
 L—Magasin Dallain. Brûlé.
 M—Maison de Beaumont—forgeron—Eboulée.
 N—Maison de Maurice Charpentier—Idem.
 O—Maison du sieur Lopinot—Idem.
 P—Maison de Flan.
 Q—Maison de la dame Treneuse.
 R—Maison et île de Brouillan. Brulée.
 S—Maison du sieur Déchaufours—Idem.
 T—Maisons de Jean-Charles et Antoine Belliveau—Idem.
 V—Maison de Sanson—Idem.
 Y—Maisons de Langevin—Idem.
 Z—Maison de François Coste—Idem.
 c—Maison de Seinseine—Idem.
- a—Maison de Jean Cobineau—Éboulée.
 b—Retrauchements faits par les anglais en juin 1707.
 e—Maison d'André Simon. Éboulée.
 d—Maison de Sd. Louis—Éboulée.
 e—Maison à Denis.
 f—Maison à Lavergne—Éboulée.
 g—Maison du sieur de Labat—Éboulée.
 h—Maison de Nighan Robicheau—Éboulée.
 j—Maison de Prudent Robicheau. id.
 k—Maison de Pierre Landry—id.
 l—Maison de Claude Landry—id.
 m—Maison de Pierre Pellerin—id.
 n—Maison de Villate—id.
 o—Charles Doucet—id.
 p—Maison de Bernard Doucet—id.
 q—Maison de Maillart—id.
 r—Montagne appelée Le Lion Rampant ou est enterré le coeur de M. de Brouillan.
 s—Retrauchements faits en 1708 pour empêcher le passage de la petite rivière aux ennemis.
 t—Moulin de Louis Allain ou les ennemis passèrent le 7 juin, 1707 pour venir bloquer le fort.
 u—Maison dudit Allain Éboulée.
 y—Maison de Charles Robicheau—id.
 z—Moulin des Landris.
- Remarques que tous les marais qui ne sont pas fermés sont joinondes aux grandes marées.
1. Maison de Robin.
 2. Bassin—commencé cette année pour mettre les barques.