
KENNETH DONOVAN

Imposing Discipline Upon Nature: Gardens, Agriculture and Animal Husbandry in Cape Breton, 1713-1758

Résumé

Cet article sur l'horticulture dans l'Île Royale (Cap-Breton) décrit les efforts des Français pour subvenir à leurs besoins alimentaires au moyen de potagers, de bétail et de petites fermes mixtes («ménageries»). Pour composer avec le climat plus froid et le sol mince de Terre-Neuve, puis du Cap-Breton, les Français ont appliqué diverses solutions novatrices au problème de la pauvreté des sols. Convaincus que rien n'était impossible s'ils y mettaient la main-d'œuvre suffisante, les Français ont construit des routes et des ponts, rempli des marécages, épierré les sols, importé du terreau fertile, aménagé des plates-bandes surélevées, créé des étangs, des puits et des fontaines, utilisé des cloches de verre, de l'engrais, des algues, du calcaire et du compost, bref, ils ont plié la nature à leurs besoins et transformé les terres les plus pauvres en généreux potagers.

Abstract

This paper examines horticulture in Ile Royale (Cape Breton) and focuses on the French attempt to grow food through the introduction of gardens, animals and small mixed farms (menageries). Adapting to the colder climate and marginal soil of first, Newfoundland, and then Cape Breton, the French introduced innovative solutions to the difficulties of land infertility. The French had confidence—given enough manpower—that anything was possible. By building roads, bridges, filling marshes, removing rocks, transporting rich soil, making raised beds, creating ponds, wells, fountains, using glass bells, fertilizer, seaweed, lime and compost, they imposed a discipline upon nature and transformed the most barren ground into bountiful gardens.

Introduction

Widespread, intensive gardening had been introduced to Europe at the beginning of the 17th century. By the 18th century, gardening had become a skill and this development helped ease the occurrence of famine and agricultural crises that had been so common in the 16th and previous centuries (Le Roy Ladurie 1971, 92-93). Unlike arable fields, gardens were “artificial” creations since they required intensive labour to transport soil, to plant seeds, to arrange beds, to develop paths, to erect fences and to add fertilizer and water (Weltman-Aron 2001,

1-13). A host of new gardens—vegetable, herb, flower, fruit and medicinal—began to emerge in Europe, making it possible to vary the everyday consumption of cereals (Roche 2000, 223). Garden cultivation allowed such new vegetables as carrots, turnips, cabbages, cauliflowers, parsnips, peas and potatoes to be introduced (Faucher 1959).

This paper examines horticulture in Ile Royale (Cape Breton) and focuses on the French attempt to grow food through the introduction of gardens, animals and small mixed farms (menageries).

Adapting to the colder climate and marginal soil of first, Newfoundland, and then Cape Breton, the French introduced innovative solutions to the difficulties of land infertility. The French had confidence—given enough manpower—that anything was possible. By building roads, bridges, filling marshes, removing rocks, transporting rich soil, making raised beds, creating ponds, wells, fountains, using glass bells, fertilizer, seaweed, lime and compost, they imposed a discipline upon nature and transformed the most barren ground into bountiful gardens. The physical manipulation of the environment in Ile Royale, however, was part of the broader context of fortress construction that began in France under Sebastien le Preste de Vauban in the late 17th century. The Louisbourg fortifications, the largest in North America, were modelled on the Vauban style. During the 1660s, Vauban, the first titled military engineer in France, began to build a system of defences that changed the landscape of France. The geometric shapes of fortress design had a significant influence on the countryside, especially the surface geometry of gardens “providing a model of discipline over people and nature that testified to the power of the state” (Mukerji 1997, 94).

In an attempt to cope with the shorter growing season, the French in Cape Breton also developed microclimates through use of high fences and the walls of adjoining buildings. They introduced aesthetic design elements in their gardens, incorporating geometrically-controlled spaces with a sense of proportion, including the use of view planes and vistas. The French modified the landscape to suit their purposes—the decoration of the garden began to change “making it a showplace for French design” (Mukerji, 98). Besides experimenting with plants, they also collected Cape Breton flora and fauna and preserved rare botanical species. Finally, the French cut vast tracts of forest for firewood and raised a wide range of livestock. The governor of Nova Scotia noted in 1775 that there was “no wood whatever” in the vicinity of Louisbourg.¹ The French cleared the forests of trees in all of their outposts, including Niganiche (Ingonish), the second largest settlement on the island with 740 residents in 1737. By 1813 Augustus DesBarres, the Attorney General of Cape Breton, had visited Ingonish and reported that the land had been “originally improved by the French. They are still clear of trees; the lands are generally covered with grass” (DesBarres 1818, 80). The cleared land provided hay and enormous communal pastures where the

animals roamed free because the gardens were protected by fences. The animal manure, in turn, was critical for the gardens, part of a symbiotic, disciplined process of controlling nature.

Early Attempts to Promote Agriculture

Although French fishermen had been coming to Cape Breton since the 16th century, the island was only permanently settled by the French after 1713. The Treaty of Utrecht, which ended the War of the Spanish Succession in 1713, gave Nova Scotia and Newfoundland to Britain leaving France Cape Breton and Prince Edward Island. According to the treaty, the French were entitled to emigrate to French territory within a year, taking their possessions with them. The settlements on Cape Breton were intended to replace Placentia as the headquarters for the fishery and serve as a haven for trading ships and privateers. Within a few years the Cape Breton fisheries were substantial; by 1720 they produced about 150,000 quintals (one quintal equals 50 kg) of dried cod a year. Migrants and residents, fishing from many ports in eastern Cape Breton, practised an inshore boat fishery. Schooners, most of them based in Louisbourg and Ingonish, also made voyages of twenty to thirty days to the fishing banks (Donovan 1987). Louisbourg was the capital of the colony of Ile Royale but the French used the names Ile Royale and Cap Breton interchangeably.² The name Cape Breton has been in use for 500 years.

Although the fishery was paramount, there was an effort by French authorities, from the earliest attempts to settle Cape Breton, to promote agriculture, especially gardening. Most of the early surveyors of the island stressed the agricultural potential of the land, particularly in comparison to Newfoundland. In 1700 the French surveyor St. Marie made a reconnaissance of the coast of Cape Breton and reported to France that “Baie St. Anne is a good harbour and the surrounding area grows fine cereals.” At St. Peter's he noted that the land is of good quality and that Nicolas Denys (1598-1688) “has planted wheat, two species of barley ... all of which is coming to perfection and maturity, I am sure that a *minot* of wheat will produce more than twenty fold. As for gardens, all sorts of vegetables are coming perfectly well, the same for pumpkins, watermelons, and cucumbers.”³ (One *minot* equals approximately 39 litres.) Nicolas Denys, who had a fishing and fur trading post at St. Ann's and then St. Peter's from 1652 until 1668, had noted that the

captains of fishing vessels cultivated gardens for a fresh supply of “salads, peas and beans” (Denys 1672, 318).

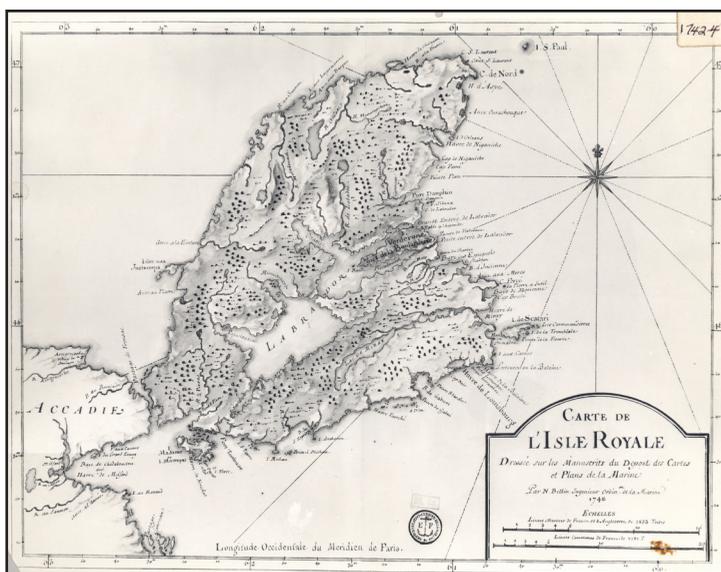
Seeking sites for suitable settlement, Louis Denys (grand nephew of Nicolas) wrote in 1713 that he had visited St. Ann's and saw the wheat fields that his grandfather Simon Denys had planted some sixty years earlier. The Mi'kmaq maintained that the fields produced the “most beautiful wheat in the world.” He also saw “very fine apple trees, from which we have eaten fruit very good for the season.” He “strongly recommended” that a settlement be established at St. Ann's because the codfish was abundant and the land was good for farming.⁴ Several years later Philippe de Costebelle, the island's first governor, referred to St. Ann's and its vicinity as the “garden of Ile Royale.”⁵ Barely three years into settlement (1716), the French harvested from the land a wide variety of produce including “Wheat, beans, ... and peas, cabbages, dock, chicory, celery, artichokes, lettuce and other salads; in the woods, strawberries, raspberries, blueberries, and small fruit called cranberries” (Chancels 1959, 426).

Cereals and Vegetables in Historical Context

The French had grown wheat, cereals and vegetables in their gardens at Placentia, Newfoundland, during fifty-one years of permanent settlement (1662-1713) prior to coming to Cape Breton. Once on Cape Breton, they operated much the same as they had in Newfoundland; they established gardens in the outports, undeterred by the harsh climate and relatively poor soil of the island. Thousands of property transactions cited gardens, including the type of garden, the dimensions, the condition of the soil, the nature of the fences, the raised beds, the wells, the value of the garden, if in vegetables and other accompanying features.

Gardening in Cape Breton included growing cereals as well as vegetables since black or white bread was the staple food in France (Mandrou 1976, 14-15). Bread was also a staple in Cape Breton; the dietary habits of the people of New France differed little from the homeland.

Food shortages were a feature of life in Cape Breton. Noting how such shortages affected her, Marie Anne Peré, a Louisbourg fishing proprietor, wrote to her supplier, Pierre Joubert, in Nantes in December 1733, that she hoped for the timely arrival of Joubert's ships in the spring with “much



bread or flour, peas or beans some salt and other items such as wine and brandy which are very scarce here.” Madame Peré left detailed accounts of the food she provided for three of her fishermen during the winter of 1733. The essentials—bread, peas, butter, molasses and olive oil—cost 133 *livres*. Bread, in the form of six-pound loaves, was the number one ingredient; the men consumed 302 pounds during the winter (CAOM, G²195, n 83).

Fig. 1
Ile Royale (Cape Breton) in 1742. (BN, Cartes & Plans, Service Hydrographique de la Marine, 131-2-6)

Wheat and Cereals in Ile Royale

Since bread was vital to the French diet, there was a continuous effort to grow wheat and other cereals in Ile Royale. The island's gardens provided individual families with their necessary foodstuffs, cereals included. Beyond the individual family, however, cereal and vegetable production for fishermen and soldiers was only possible with numerous men and equipment as well as draft animals such as oxen. With the exception of the best farm land and resources, most gardeners throughout Ile Royale were hard pressed to successfully grow wheat in the short growing season. “Hitherto they have been able to reap no sort of grain,” wrote Thomas Pichon in the 1750s. “In some places they have begun to sow wheat and rye but never could bring them to proper maturity. I believe that oats would grow here, if the small quantity the island is able to produce, was worth sowing. It has been even observed that the grain sown in this country degenerates in the second year” (Pichon 1760, 14-15). Cape Breton has a good climate for growing oats but wheat production, in the short growing season, was difficult since it required diligence. Louis Petitpas's garden in St.

Catalogne's letter, Maurepas sent a memoir to Governor Saint Ovide inviting the king's subjects in Ile Royale to collect objects of interest and to write about them (AN, B, 52, f 570-1).

Another contemporary of Catalogne and Boucher, François Vallée, was also trained in the engineering sciences and he conducted agricultural experiments much like Catalogne. Appointed deputy surveyor for Ile Royale, Vallée had planted a small flower garden in Louisbourg with "foreign plants" as well as plants imported from Acadia in order to send the seeds to France. Vallée's reports and plans are among "the best surviving documentary evidence of town planning at Louisbourg" (DCB 3, 636-7). Vallée's experiments growing "foreign plants" were part of a commission from Maurepas and Antoine Rondeau, resulting from his last trip to France (CAOM, G², 27 June 1733, 182, f 1057).

Like Vallée and others, Le Poupet de la Boularderie "kept a rare botanical collection" of Cape Breton plants (Du Boscq De Beaumont 1975, 287). Botanic gardens had become commonplace by the 18th century, especially since the total number of known plants was relatively small (Schnapper 1991, 175-77). There were only ten thousand species listed in 1713 compared to some half million known today. By the 18th century the botanic gardens evolved to become herbaria as well because of the medicinal value of so many plants (Tongiorgi Tomasi 1991, 81- 84). Thus, when the surgeon left Rochefort for Louisbourg in 1718, there were 102 different herbal medications sent to the hospital. There were a total of fifty surgeons in Ile Royale from 1713 to 1758 and the apothecaries at the hospital grew herbal plants in their garden (Hoad 1976, 299-302).

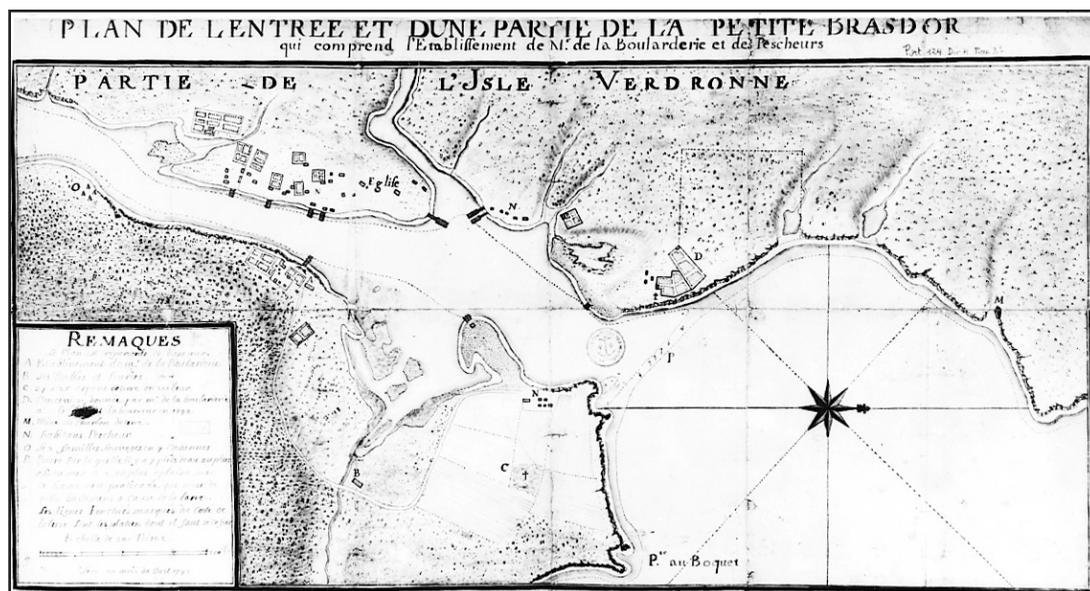
Seeking and identifying new species provided the context for Boularderie's collection of rare botanical Cape Breton plants. Although not trained as scientists, Boularderie and his son Antoine, both well-connected in Versailles, were among the most successful agriculturalists in Cape Breton. A lieutenant at Placentia, Boularderie proposed the establishment of an agricultural settlement at Ile de de Verderonne (Boularderie Island) and the eastern shore of Little Bras d'Or. Granted a seigneurie at Little Bras d'Or on February 15, 1719, Boularderie travelled to Canada the following June seeking workers to clear the land. He also bought animals, stores and seeds in Canada for his establishment.⁶ In 1723 there were twenty men wintering at Little Bras d'Or clearing land for the production of cabbages and turnips (CAOM, G², 9 Oct 1726, 180, f 364; CAOM, CIIB, 10 Oct 1733, v 14, f 22-30).

Ten years later, eight men had sown a "considerable field" of peas that had produced good results and also harvested wheat that was well matured and hardy. The following year Boularderie marketed unmilled grain in Louisbourg and by 1737 he had completed a water-powered mill (DCB 2, 418). Production increased steadily at the farm so that by 1737 Boularderie had produced 50 to 60 barrels of wheat, 12 to 15 barrels of peas, some barrels of oats and a little barley.⁷ By 1742 Boularderie had 35 square *arpents* of land in production at Little Bras d'Or as well as three large gardens, barns and stables. (One *arpent* equals 30 *toise*.)

Prior to coming to Cape Breton in 1739 to take over his father's farm in Little Bras d'Or, Boularderie junior recruited agricultural workers in Normandy and "all the utensils necessary for the cultivation of the land." Over an eight-year period Boularderie employed twenty-five workers who developed a successful farm including a fine manor house, barn, stable, dairy, dovecote, oven, windmill and watermill. He kept fifty sheep, twenty-five cows, six oxen, six mares and one stallion. "I had land in production," he noted, "which yielded beautiful wheat and vegetables as in France, moreover I had brought fruit trees from France, which also succeeded" (Du Boscq De Beaumont, 287).

Apple trees, grown from seed, had been introduced to Cape Breton during the 1630s. The apple trees of St. Ann's had been first planted in 1632 and harvested in 1680.⁸ When Monsieur Melchin visited St. Ann's in 1713 he reported seeing apple trees that "had been thought to have been planted by the late Mr. Denis" (CAOM, DFC, No. 271). Throughout the 18th century the French in Ile Royale imported apple cultivars from France and New England. Eight apple trees, for instance, were brought to Cape Breton from New England in 1732 (Moore 1975, 43). In 1752 43-year-old Maurice Leveque and his family had apple trees in St. Ann's. "They had made a clearing for a garden in which they have grown all sorts of garden produce," noted the census taker, "and in which they have six apple trees bearing fruit" (De La Roque, 42). The remains of these French-regime apple trees can still be seen in the Mira River area. Scottish immigrants who settled on the Mira in the early 1800s took seedlings from the French trees and planted them on most of the farms from Hillside down to the mouth of the river. Subsequent generations of apple trees found in this area may still contain some of the genetic stock of the original apple trees introduced during the French regime.⁹ Known as the "French apple," the apples

Fig. 3
 Boularderie's
 Farm at the Mouth
 of the Little Bras
 d'Or in 1742.
 (BN, C&P, SH,
 124-4-3)



were small, had white flesh with a bright, red skin and made excellent apple jelly. Florence McIntyre, born 1927, noted that her great-grandfather, John MacKinnon, planted the orchard on her property from seedlings grafted from the French apple trees (Florence McIntyre, personal communication).

Louisbourg officials toured Ile Royale and reported on agricultural production, including fruit trees, as well as exotic plants and animals. Commissaire-ordonnateur François Bigot, for instance, sent two cages of ducks and another cage of passenger pigeons to the king's menagerie at Versailles on the ship *Caribou* during 1744. Bigot specifically entrusted Captain La Saussaye, commander of the vessel, with this special cargo.¹⁰ Established in 1662, the king's menagerie was actually a farm with a dual function since it had a dovecote, barns, cowsheds and dairy as well as a small residence sheltering exotic animals and rare birds (Mabille 1991, 172- 74).

The Ile Royale ducks and passenger pigeon were intended to be added to the royal collection. Passenger pigeons, grouse, Canada geese and other waterfowl such as black duck, eider, scoter, long-tailed duck and blue-winged teal formed an integral part of the Louisbourg diet, particularly during the migration season.¹¹ Other Cape Breton fauna were sent overseas. On December 8, 1744, for instance, Louisbourg metal worker Michel Vedrine was paid 52 *livres* for the construction "of an iron cage for a beaver sent from Louisbourg to the king's menagerie at Versailles" (AN, ClIc, v 12, f 148). (One *livre* was the approximate equivalent of one British shilling).

Some new vegetables, such as potatoes, were also introduced during the 1740s and 1750s. Louisbourg officials, for instance, imported sixteen bushels of potatoes in 1742 from Boston and by 1757 former Governor Raymond urged officials in France to send seed potato, among other vegetables and grains, to Louisbourg for planting by the end of April 1757.¹² The planting of potatoes in Cape Breton reflected similar innovative efforts throughout the region. The New Englanders who had captured Louisbourg (1745-49) imported hundreds of bushels of potatoes.¹³ Meanwhile, the British had harvested potatoes in Halifax as early as 1750. The Acadians, in turn, had grown potatoes, on an experimental basis, in Acadia throughout the 1750s.¹⁴

Engineers and the Harmony of Design in French Gardens

At least two other scientists, Etienne Verrier and François De Poilly were among a total of fourteen engineers who served at Louisbourg and filed descriptions of Ile Royale's gardens and agriculture in their reports and especially in their maps and plans. Engineers had played a vital role in the design of gardens in 17th- and 18th-century France. French gardens, noted for their sense of proportion, were much like bastioned fortresses because they applied much of the same principle—all parts must harmonize. The gardeners were conscious of geometrically-controlled space, the range of the eye along view planes and the retention of vistas by making the length proportionate to the surrounding

mass (Vérin 1991, 135-46). Etienne Verrier, the chief engineer at Louisbourg from 1724 to 1745, was responsible for the design of the fortifications and the principal public buildings as well as the lighthouse and the harbour front of the town.

At 31 years, Verrier arrived in Louisbourg with a fine reputation as an engineer and an appreciation for aesthetic design. Responsible for more than 100 Louisbourg plans, his colourful drawings include the Dauphin Gate, the hospital, the lighthouse, the royal and island batteries and the engineer's residence, to name a few. All of these plans survive in the Archives Nationales, the Bibliothèque Nationale, the Comité technique du Génie and other repositories in Paris and many of them record, in precise detail, the gardens of Louisbourg. Among the plans are those of his beautiful residence with well-designed garden, menagerie and garden pool. Built at a cost of 28,000 *livres*, the engineer's residence was one of the finest buildings in the town. When the excavations of block 1 were completed in the 1960s, everything throughout the entire block, including the king's storehouse, the old storehouse, the artillery shed, the bakery, the garden pool and the garden were found exactly as Verrier had drawn them. The garden, as shown in 1735, measured 10 *toise* by 8 *toise* with six beds, four of which were planted with completely different and intricate designs. The garden was presumably planted with vegetables, grains, herbs and flowers. The 1735 plan, "an usually detailed record of the yards and buildings" in block 1, was most accurate. "Many of the seemingly incidental features, such as the well in the Rue Toulouse, the terrace wall

in the Engineer's garden, and fence lines in block 1, have been verified archaeologically" (Fortier 1972, no. 17).

Like Etienne Verrier, François de Poilly was a military engineer who served in Louisbourg under Louis Franquet from 1755 to 1758. Poilly assisted in the planning for the repair and reconstruction of the defences and public buildings of Louisbourg. Following in his own footsteps, Franquet commissioned Poilly to go on an excursion around Ile Royale in February and March 1757 in order to correct the maps of the island, to propose road improvements and to suggest repairs to public building and fortifications at St. Ann's and St. Peter's. Travelling on snowshoes, Poilly and his party toured much of Cape Breton. He kept a twelve-page diary describing the island's resources including the French and Mi'kmaq inhabitants and the condition of the roads and buildings (DCB 3, 267-68). Poilly had specific suggestions for the improvement of the island's agricultural, game and forest resources. On the Mira River he recommended increased manpower in order to develop the good soil along the alluvial plain of the river. For the settlements along the Bras d'Or Lake from Boularderie Island in the north to East Bay in the south, Poilly called for more oxen to pull ploughs and to provide fertilizer in order to produce certain types of grain. New farms at St. Ann's also required new ploughs and cattle (Génie, 2 May 1757, man. 210 f).

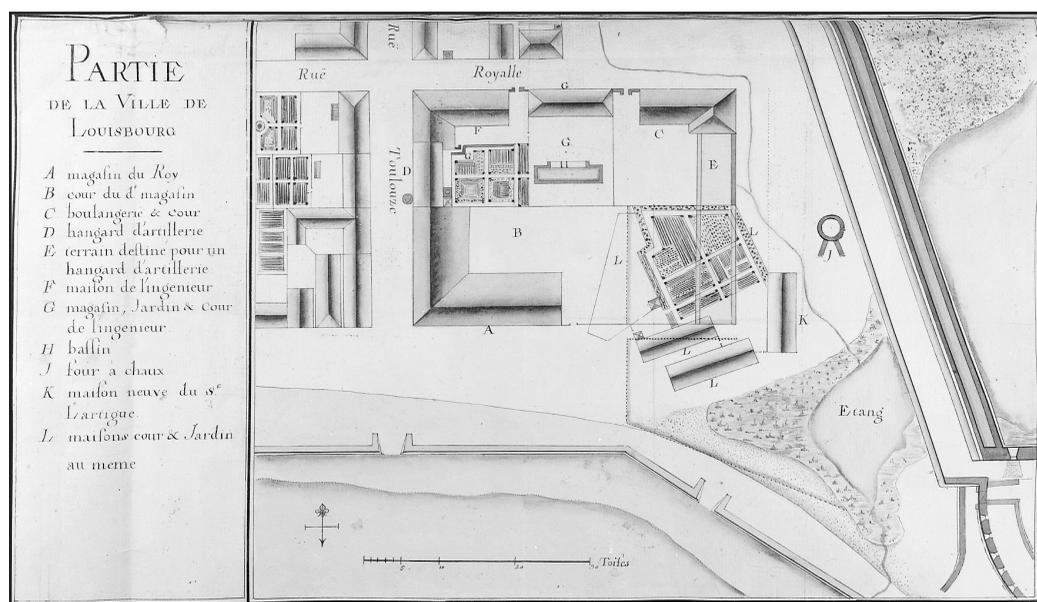


Fig. 4
The Garden, Menagerie and Garden Pool of the Engineer's Residence in 1735. (AN, Atlas Moreau de S. Méry, F 3-290)

Changing the Landscape

To ensure ideal conditions for proper cultivation, property owners in Ile Royale transported topsoil. It became commonplace to move rich earth to improve marginal ground and thus soil was carted in Louisbourg for all manner of gardens. As early as 1723 block 18 in Louisbourg was reserved for the *ordonnateur's* garden. Built of transported soil, the garden in block 18 was eventually taken over as the parade square. In 1732 the king's garden, a "new garden divided between the the governor and the *ordonnateur*," was built in block 35 (AN, CIIB v13 f92). By 1740 the quality of the soil required further improvement and in the spring of 1741, 297 *livres* was paid to various workers to move soil from the *glacis* of the fortifications to the king's garden (AN, CIIB, 18 Oct 1741, v 23, f 173).

The movement of topsoil was not necessarily a one-time affair because new soil and fertilizer were often added yearly to replenish garden nutrients. Antoine De La Forest, an official with the Louisbourg admiralty court, had a large property 75 *pieds* long by 100 *pieds* wide including a house, storehouse, courtyard and gardens, all enclosed by a picket fence in the Dauphin Fauxbourg just outside Louisbourg's walls (AN, CIIB, 19 Oct 1742, v 24, f 219-2). La Forest's estate had a courtyard in front of the house measuring 30 *pieds* by 70 *pieds* surrounded by a picket fence with a "*grande porte d'entrée*." The garden behind the house was 60 *pieds* square and was of high quality because La Forest carted "soil and manure into it every year" (AN, CIIB, 20 April 1728, v 10, f 154v). At the other end of the town, La Forest's superior, Louis Levasseur, judge of the admiralty court, also ensured that his vegetable and ornamental gardens were well established with soil and manure. During the years 1730 to 1733, Levasseur contracted workers for the construction of his house and gardens on block 23. Levasseur paid more than 730 *livres* for the excavation and transport of soil to prepare three large gardens for cultivation. With a total area of 1871 square *pieds*, 2892 cubic *pieds* of rich earth were moved into the Levasseur gardens by various contractors, mostly soldiers. Soil was excavated from the front of the house line for the walkways and twelve days was spent carting "good earth" for the square garden beds. The workers also screened rocks from the soil and rolled the earth in the garden beds and outside the beds. Another man carted seaweed as fertilizer for the gardens. Soil was also excavated and transported to create a peat pile, a

"*place des tourbes*" for the garden, measuring 12 *pieds* x 1.5 *pieds* x 7 *pouces* (CAOM, G 2, 1734, 208, doss 479, *pièce* 25). Although the Levasseur gardens were among the largest in Louisbourg, soil was also moved to modest properties. A Monsieur Poincu, for example, paid 12 *livres* 5 *sols* to some soldiers "for seven barrels of rich earth" during the 1750s (CAOM, G 2, 1749 to 1756, v 212, doss 540).

The Aesthetic Function of Louisbourg Gardens

In terms of garden design and agricultural innovation, the French set the standard for the world during the 18th century. Material culture, manifested in the mobilization of nature and technique, was part of the consolidation of French national identity (Mukerji, 98). Although the Louisbourg gardens were intended primarily to provide fresh vegetables, they were also designed with a sense of proportion and incorporated elements of beauty to enhance their aesthetic appeal. The decoration of Louisbourg gardens is evident in the hundreds of plans and views showing elaborate designs. Of the 506 maps and plans of Cape Breton from 1702 to 1758, 115 show the gardens of Louisbourg and other outposts. Admittedly, these plans have to be used with caution but they send a powerful, visual image about the significance of gardens in Cape Breton. At Versailles and throughout the French countryside, planting and building projects were emerging that were symbols of a new French taste and style. This new style was also appearing in art, music, dance, architecture, clothing, food and numerous other endeavours characteristic of the Enlightenment (Roche 1998). As a symbol of the era's aesthetic sensibility, Louisbourg officials, for instance, completed the beautiful monumental arch, the Frederick Gate, at the foot of Rue Toulouse in 1742. There are other examples of the tasteful design and proportion in Louisbourg's architecture, including the elegant king's bastion clock tower, the hospital spire, the rococo design incorporated into the Maurepas Gate and the Demi Dauphin entrance into the town. Louisbourg's formal and ornamental gardens—a style of landscape architecture—were linked with the broader social and political culture of France. The classic garden, part of the transformation of the environment, was "based on an exploitation of the existing site and a knowledge of the latest cartographic and geographic techniques of mapping and inventory" (Mariage 1999, xiii). Louisbourg gardens thus had an aesthetic dimension that was



Fig. 5
Detail from a 1731 View showing Louis Levasseur's House and Gardens in block 23. Note the fences and ornamental gates in the front and back gardens. (BN, Cartes & Plans, Ge C, 5019)

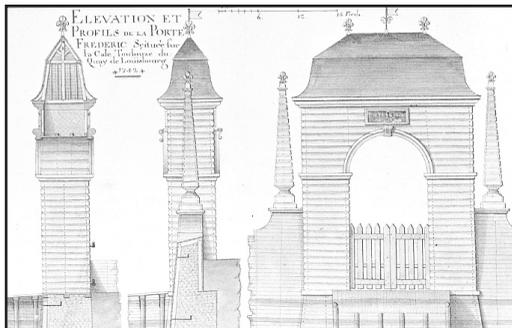


Fig. 6
The Fredrick Gate, an aesthetic monumental arch, welcomed visitors to Louisbourg in 1742. (Génie, 14 Louisbourg tablette no. 5)

intrinsic to the wider cultural milieu. Writing in his memoirs Chevalier Johnstone, an officer who lived in Louisbourg from 1750 to 1758, described the pleasures of his garden:

I have a small garden in front of the windows of my chamber, which St. Julien [his servant] had cleared to serve me for relaxation, when I was fatigued, and my eyes weakened by reading. I there enjoyed a true and perfect satisfaction from the esteem and friendship of all my comrades, which was not an easy matter to secure. (Johnstone 1870, 179)

Variation in design was a feature that contributed to the aesthetic elements of Louisbourg gardens. Jacques Boyceau, for instance, had published his *Traité du Jardinage selon les raisons de la nature et de l'Art* in 1638. The first French book devoted to pleasure gardens and their decoration, the text called for variety in the design of the garden and emphasised elements of relief such as bowers, ornamental groves, pavilions, fountains and sculpture (Jellicoe and Jellicoe 2001, 69). Such decorative design elements spread throughout the Western World, including Ile Royale. The Levasseur gardens, for instance, were designed with a sense of proportion to enhance their appeal. Levasseur's gardens had alleyways with an elaborate fence as well as a trellis and bower (CAOM, G 2, 25 July 1734, 208, doss 479). In 1731 "Maitre" Duval, a joiner, spent two-and-a-half days making a trellis for the garden of Claude Desmarest, the royal notary at Louisbourg (CAOM, G 2, 208, doss. 479, *pièce* 5). Bonnaventure Le Brun, manager of a fishing company on Ingonish Island in 1726, also had a bower 15 *pieds* long in one of his 80-*pieds*-square gardens (CAOM, G 2 27 Sept, 180, f 365). A vault-shaped trellis, the bower had creepers, vines, roses

and other climbing plants (Russell and Thorton 1999, 250).

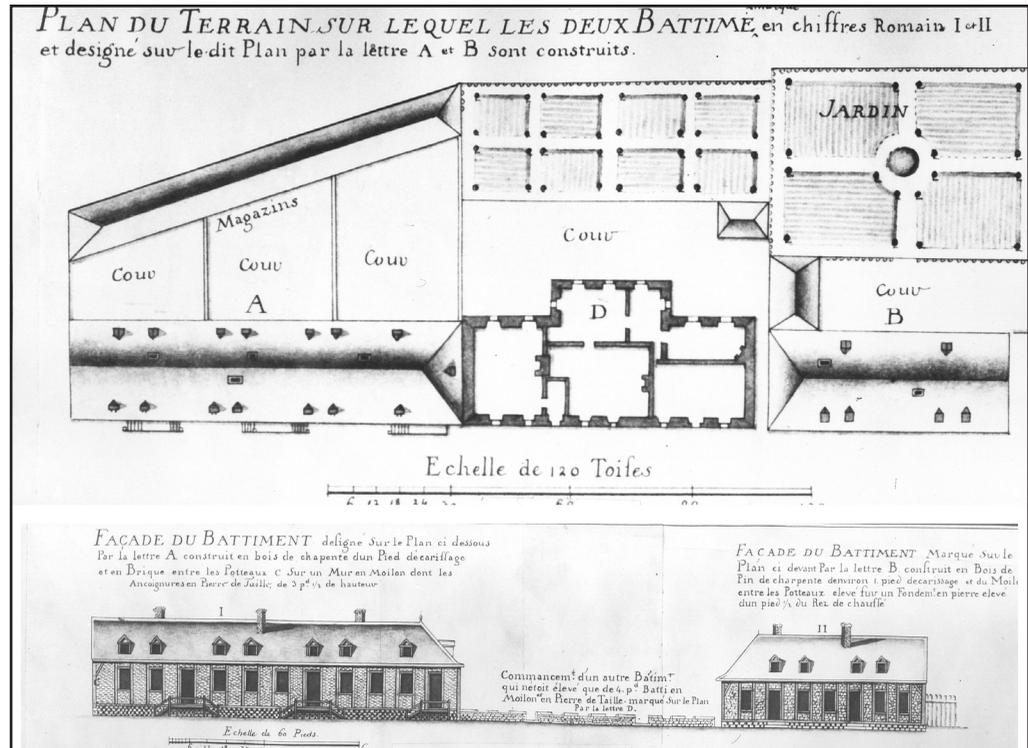
The French enjoyed their flower gardens. Louisbourg homes, for instance, had flower vases, boxes (G², 20 Sept 1753, 202, doss 287) and containers for bouquets of fresh flowers (CAOM, G², 209, doss 507). Fresh-cut flowers sold for 20 *sols* per bouquet in

Louisbourg in 1737 (CAOM, G², 28 July, 184, f 236). Artificial flowers, especially those representing individual species, were also popular in Ile Royale, reflecting the increased demand for artificial flowers throughout France during the 18th century (Hyde 2005, 24). The church in nearby Baleine, for example, had a garland of artificial flowers in December 1726 (CAOM, G², 179, p 458) and the altar of the king's chapel was also decorated with floral arrangement for Christmas in 1744 (CAOM, G², 189, f 199). One Louisbourg shop offered twenty bouquets of artificial flowers for sale in 1743 (CAOM, G², 8 Oct, 198, doss 180). There were also carved wooden picture frames depicting flowers, as well as pictures of flowers (CAOM, G², 1740, 197 doss 129). During their occupation of Louisbourg, the British also cultivated flowers. Louisbourg engineer John Bastide noted in April 1748 that his wife was "very busy about the flower garden."¹⁵

Other Louisbourg gardens were small and delightful, reflecting the more intimate character of gardens under Louis XV, compared to the grandiose schemes of Louis XIV. As in France, there was an attempt to integrate the house with the garden. Some homes had small adjacent rooms for such items as garden tools, work shoes and watering cans to be easily accessed on the way to the garden.¹⁶

One man had an elaborate *jeu de bagues* (ring game on a turning post, valued at 200 *livres*) in the courtyard adjacent to his herb garden. Bowling (*jeu de quilles*) was popular in Louisbourg and was played on garden paths or on greens in the garden or adjacent to the garden. As early as 1630 the French were playing skittles outside at St. Ann's. There were at least thirteen billiard rooms in Louisbourg,

Fig. 7
 A 1753 Plan showing two
 Louisbourg houses of
 Jeanne Lartigue. These
 houses, in profile and
 plan, complement the
 courtyards and gardens
 in a well-proportioned
 and harmonious fashion.
 (AN, Dossiers Personnels,
 Séries E, no. 258)



many adjacent to the garden (Donovan 2007). Some houses had windows or glass doors overlooking the garden whereas others had fountains, view planes, alley ways of coloured flint, sundials and flower boxes. Garden benches provided places to look along the alleyways, to take in the view planes and to admire the beauty of the vegetables and flowers, as well as allowing space for contemplation, relaxation and conversation. Thus, in 1743 Antoine Legras, a joiner, delivered four benches that he had made for the king's garden (AN, CIIC, v 12 f 91-104).

Creating a Micro-climate: The Use of Fences and Adjoining Buildings

Although Cape Breton has a harsh climate, the island has a longer growing season and better soil than Newfoundland. With their Newfoundland experience, the French knew what to expect when they came to Louisbourg and they took elaborate precautions against severe weather, especially the winds. In 1720 an ordinance was passed in Louisbourg stating that fences separating yards and gardens could be made of wooden pickets and this became the standard practice (AN, CIIC, 1720, vol 15, f 230). Although varying in width, pickets were planted so that they were 5 to 7 *pieds* above the ground in order to provide protection.¹⁷

All gardens were fenced and the walls of adjoining buildings were used whenever possible to create a microclimate. The French also drove stakes between openings in picket fences in order to protect the plants from the cold winds. Horizontal wooden rails added strength and helped to keep the fences straight (CAOM, G³, 2047 suite, 4 April 1752, no 33).

Thousands of property transactions described how the garden was surrounded with pickets, usually listing the dimensions and condition of the fence. As early as 1723 block 18 was reserved for the Commissaire-ordonnateur's garden (AN, CIIC, v 16, 31 May 1723). Block 18 was eventually taken over as the Place d'Armes and in 1732 the king's garden, a "new garden divided between the governor and the *ordonnateur*," was built in block 35 (AN, CIIB, v 13, f 92v). Approximately one square *arpent* in size, the garden was enclosed by pickets from 1729 to 1733 (AN, CIIB, 21 Oct 1733, v 14, f 114-6). One plan from 1731-32 showed details of this picket fence under construction. The outer wall of the fence was straight, tied together with finished planks. On either side of an ornamental gate there were two gates used for everyday, practical use. The gates each had two large square posts anchoring the swinging door between them. The garden beds adjacent to the fence were contoured away from the entrance of the gates.

Since picket fences were expensive, the contract specifications for building the fences were often stipulated. Francois Duviver required 20 *toises* of fencing around his house and garden in 1751. He wanted the pickets to be four *pieds*, 10 *pouces* above the ground and two *pieds* six *pouces* in the ground and to be tied together by a rail embedded and nailed into the fence. The cost was 14 *livres* per *toise* for a total of 291 *livres*. (AN, CIIB, 1751, vol 30, f 229). Given such significant costs, property owners objected to individuals climbing over the palisades and damaging their property. Citizens complained in 1754 that hunters and others, under the excuse of taking a short-cut, climbed over the fences on the outskirts of Louisbourg and on the main roads. “They have wounded and killed livestock; ruined the forage and broke the fences,” noted the preamble to one law. Therefore an ordinance was passed on June 30, 1754, that hunters, soldiers and seamen were “forbidden to fire guns in gardens or enclosed fields or to climb over fences.” The penalties called for damaged fences to be repaired (AN, CIIB, vol. 34, f 7).

Gardeners and Animal Keepers

Although most people tended their own gardens, there were also numerous hired gardeners and animal keepers in Ile Royale. Louis Salmon, for instance, a Louisbourg innkeeper, hired a gardener in 1738. Salmon’s wife, Catherine, had died the year before, leaving him with five young children, the baby being less than two years old. Preoccupied with caring for his children and running the business, Salmon had little time for gardening and thus he hired Antoine Heron to plant and cultivate his vegetables. The contract, dated April 17, 1738, stated:

I, Louis Salmon confirm that I have hired Marc Antoine Heron dit Parisien to work in my garden and I promise to pay him as salary the sum of 16 *livres* per month to begin on the sixteenth of this month and to finish on the same day from month to month; and I will also feed him the same as myself. (CAOM, G 2, 185, f 313)

Heron worked in Salmon’s garden for six months until October 16, 1738. A former resident of Placentia, Heron and his wife had moved their family of six children to Louisbourg in 1714 (CAOM, G 1, 466, 14 January 1715, *pièce* 51). A cook and tavern keeper, Heron was also a gardener, since most people had to provide their own vegetables.¹⁸ Moreover, in Louisbourg’s newly formed society,

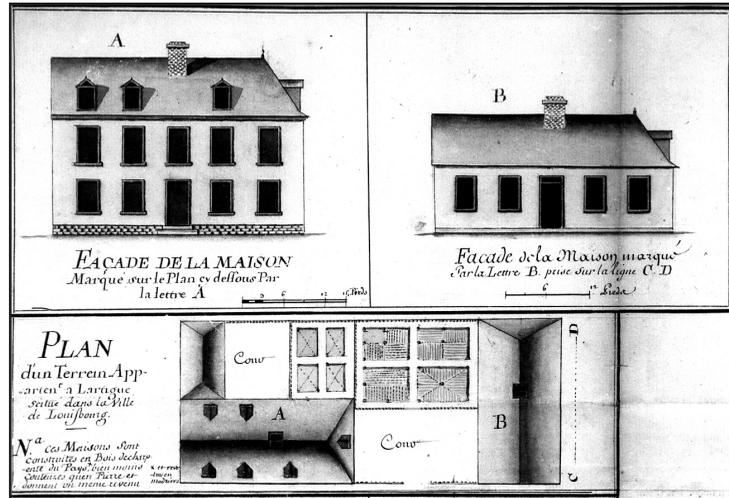


Fig. 8
A 1743 Plan and View showing how the gardens are protected from the wind on three sides by House A and B. This fishing property on Louisbourg’s North Shore is located near the present-day post office. (AN, Dossiers Personnels, Séries E, no. 258.)

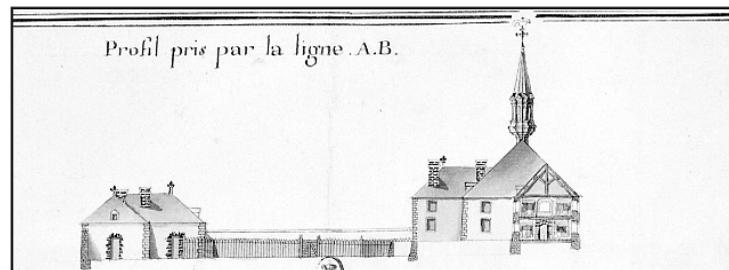


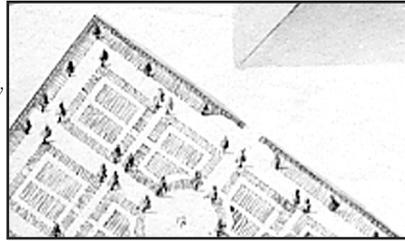
Fig. 9
A 1725 perspective of the seven-foot high fence surrounding the Louisbourg hospital garden. Note how the garden post on the left rises above the door of the laundry building. There is a horizontal rail near the top of the fence. (BN, Cabinet des Etampes, Vd. 20a, 55)

people tended to change occupations more readily than in France but, because all manufactures were imported, their occupational choice was narrow (Donovan 1987). Heron was a capable gardener since his garden at Placentia had been 92 *pieds* long and 57 *pieds* wide.¹⁹ Although getting on in years, Heron may have been helped by his sons since Salmon’s garden was 98 *pieds* long and 66 *pieds* wide, larger than Heron’s garden in Newfoundland.

Hundreds of Louisbourg residents, such as Salmon, hired gardeners to cultivate their gardens inside the town and throughout the colony of Ile Royale. Fifty people have been identified who were described as “*jardiniers, maitre jardinier, garcon jardiniers and habitant cultivateurs.*” Full-time gardeners, including garden apprentices, ensured bountiful gardens and therefore a secure supply of vegetables, greens, herbs and ornamental flowers.

Fig. 10

The King's Garden in 1732. The ornamental layout of the garden included parallel beds and topiary around a circular centrepiece. The beds were contoured away from the garden gates. (Génie, 14, tablette 8)

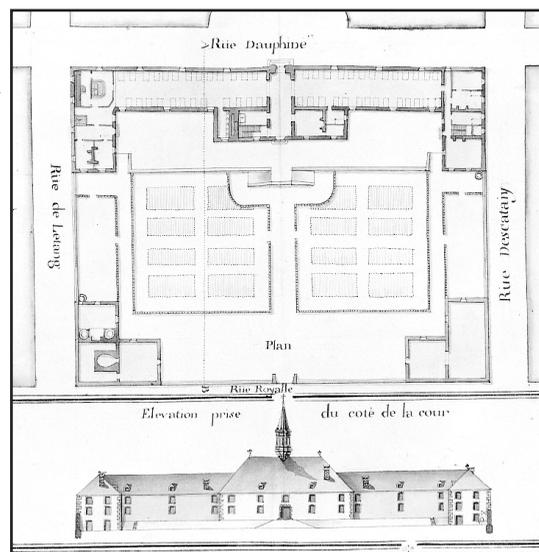


The Brothers of Charity, for instance, who operated the Louisbourg hospital, had a full-time gardener who was paid 400 *livres* per year, including his board, by 1732 (AN, CIIB, v 13, 17 March, f 42). In December of the same year Governor Saint Ovide attempted to have 300 *livres* per year allocated for a gardener (AN, CIIB, v 13, f92). The following year, on Saint Ovide's initiative, a "maitre jardinier" and an assistant were sent to Louisbourg but they returned to France because of a lack of funds to pay their salaries (AN, CIIB, v 14, 21 Oct, f 115). The governor, however, did have access to gardeners, two of whom were soldiers (CAOM, G 2, v 184, 25 July 1737, f 376-8). As at Louisbourg, it was common practice for soldiers at other garrisoned towns throughout New France to tend gardens during the summer months. At Fort Chambly, south of Montreal, soldiers hired themselves out to people of the area to cultivate their land so as to supplement their monthly income (Gelinas 1983, 52). The British soldiers at Annapolis Royal maintained the gardens for the garrison.²⁰

Although soldiers were not usually gardeners, some did have garden experience. Jean Vadeboncoeur, for instance, was care taker of Major François de Bourville's *petite ménagerie* in 1728 (CAOM, G 2, 2 Oct, 178, f 527-8). Appointed the

Fig. 11

The large gardens of the hospital in 1725. (BN, Cabinet des Estampes, Vd. 20a, 55)



king's gardener in 1741, Vadeboncoeur was paid 400 *livres* per year with Governor DuQuesnel and *ordonnateur* François Bigot agreeing to share the cost of the salary (AN, CIIB, v 23, 20 Oct 1741, f 109-10). A long-time soldier in Louisbourg, Vadeboncoeur had been groomed for the garden position. Permitted to marry Jeanne Toussain of Louisbourg in 1740, Vadeboncoeur was eventually discharged from the military and he and his wife were granted land in block 41 and allowed two rations per day in 1742.²¹ Thirty soldiers identified themselves as gardeners in Ile Royale.

***Petites ménageries* and Animal Husbandry in Ile Royale**

Most members of the elite in Louisbourg including senior colonial officials, garrison officers, fishing proprietors and leading merchants had gardens in town but also *petites ménageries* around Louisbourg harbour and in the surrounding countryside. During the years 1713 to 1758 there were 168 property concessions granted in Louisbourg harbour and many of these had gardens and or small enclosures for sheep, cattle, pigs and poultry (Fortier 1983, 51-219). Within ten years of the settlement of Louisbourg, there was also a vast, cleared countryside around the town ranging from Baliene in the east to Gabarus in the west, a distance fifteen miles long and at least two miles inland from the seacoast. The trees had been cut for firewood. There were enormous empty spaces known as the plains of Gabarus, the plains of Devil's mountain and the plains of Big and Little Lorraine down to Baliene.²²

These vast plains offered opportunities since they provided excellent forage for domestic animals such as pigs, sheep, goats, cows, oxen and horses. As early as 1717, Louisbourg authorities passed an ordinance stipulating that no buildings or fences were to be constructed or trees planted within 350 *toises* of the fortifications at Louisbourg, St. Peter's and St. Ann's. The restricted area was to be used as a communal pasture for livestock (AN, CIIB, v 2, 12 Feb 1717, f 101-02). In effect, the land outside fenced properties was free range, common pasture land. By December 1721 Louisbourg officials passed an ordinance warning soldiers not to kill sheep, cows, oxen or other livestock belonging to officers or citizens (AN, CIIB, v 5, f 392). These animals grazed in the common pasture outside the town. Even within the town of Louisbourg pigs and other animals often escaped from their pens and thus the gardens within the town were vulnerable, unless

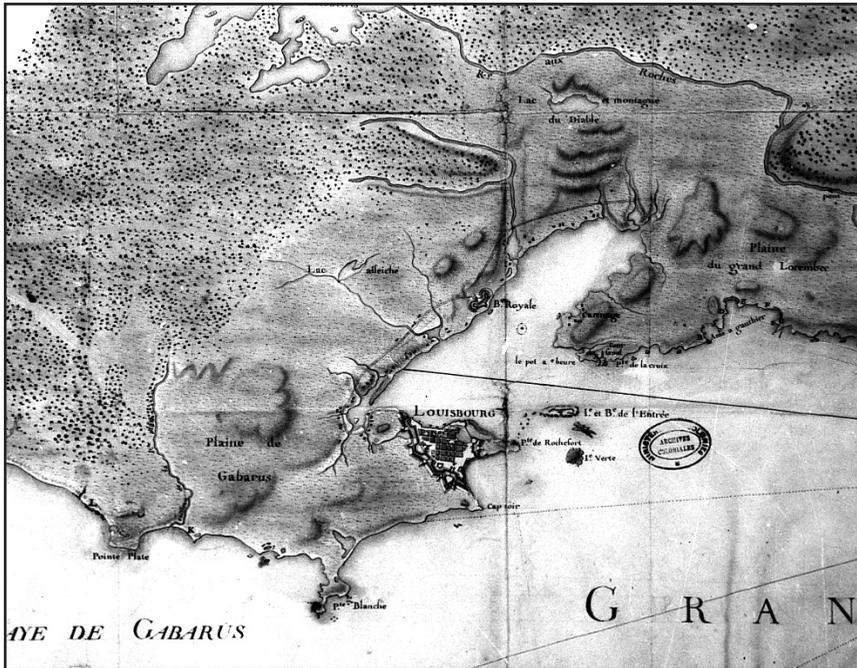


Fig. 12
 This 1757 map showed the vast cleared forests in the vicinity of Louisbourg. There were no trees in sight. (AN, CIIA, vol. 126, f. 247-8)

fenced. On June 5, 1724, Louisbourg authorities passed a law forbidding pigs to run free within the town because of the damage they caused to drying codfish, chickens and the danger they posed to children, in that order. Pig owners were required to keep the animals in their yards or to put them out in the country to forage. Free-running pigs could be killed on sight (AN, CIIIB, v 7, f 10). The ordinance was not effective since it was repeated four years later (AN, CIIIB, v 10, f 56). Ordinances against wandering animals in the town also were repeated in 1749 and 1752. The 1749 law noted that horses were not “to wander freely in the town. They must be kept in stables or taken to the country” (AN, CIIIB, 25 Aug, v 28, f 157). Three years later, a new law noted that people were permitting their animals to roam in the streets “which wears the streets so that they become impassable. Livestock must therefore be tended and prevented from doing damage” (AN, CIIIB, 31 Oct 1752, v 32, f 21).

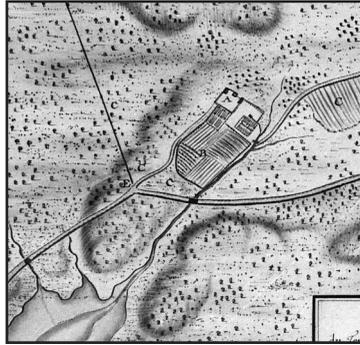
Seeking to take advantage of these open spaces, Louisbourg officials such as Governor Saint Ovide established a menagerie northeast of Louisbourg during the 1720s, as well as putting livestock on pasture lands at the head of Louisbourg harbour and at the Mira River. Established northeast of the intersection of the Louisbourg and Baleine road and running along a stream that flowed into the harbour, the governor’s menagerie in 1735 included a house, a barn, a fountain, stables, sheep pens and gardens measuring 75 *toise* by 100 *toise*. There was also 45 arpents of meadows running in a north northeast

direction that had been cleared since 1721 and that marked the boundaries of the establishment.²³ By 1741 Saint Ovide’s north shore property also had eight cows and a steer together with five hens and a rooster (CAOM, G 3, 2 July, 2046-2, pièce 24). As an officer in the Placentia garrison for more than twenty years, Saint Ovide, governor of Louisbourg from 1718 to 1739, knew the necessity of having one’s own garden plus a supply of fresh eggs, milk and meat (DCB 3, 454). Like Saint Ovide, ordonnateur Le Normant De Mézy also founded a menagerie in 1720 but his was at the fond de la baie of Louisbourg harbour (AN, B, 1 July 1721, v 44-2, f 570-3). By setting up their own menageries, Saint Ovide and De Mézy adopted a strategy that had been followed in Placentia where external gardens and menageries had been located within and outside the earthwork walls of the fortifications.

Menageries could range in size from small-fenced gardens with one or two animals to large-mixed farms with hundreds of animals. Although they varied in size, the menageries usually had a number of common elements including fenced gardens as well as barns and stables for animals such as cows, horses and oxen. The barns had to be large enough to store the winter’s supply of hay and feed for the livestock. There were usually smaller outbuildings for chickens, pigs, goats, sheep and doves and a meadow where the animals could graze from the spring until autumn. Hundreds of individuals were hired as shepherd or gardeners to tend the animals, cultivate the gardens and cut the

Fig. 13

Detail of Plan showing Governor Saint Ovide's menagerie northeast of Louisbourg in 1735. (AN, Atlas Moreau de S. Mery, F-290)



hay on these small mixed farms. Laurent Nolan, a public shepherd of sheep and goats, was paid rations valued at 122 *livres* from October 1723 to October 1724. In the margin besides Nolan's name De Mézy noted: "He is useful and necessary for the good of the country" (AN, CIIB, 30 Nov 1724, v 7, f 129v). In spite of De Mézy's marginalia, Maurepas refused in July 1725 to continue to pay for a public shepherd (AN, B, v 48-2, f 970).

As in France, Louisbourg residents paid for their own shepherds and animal keepers. Thus, Major Bourville hired soldier Jean Champroux to work on his menagerie in 1728 (CAOM, G², 2 Oct, 178) and Bernard Muiron employed 25-year-old soldier Henry Goupy to look after his menagerie at the *fond de la baie* during the winter of 1742 (CAOM, G², 198, n 164). Eventually, public shepherds were reinstated at Louisbourg. Jean Lambert, for instance, was a shepherd in the *parc du Roy* during the 1730s and Louis Paget came to Louisbourg in the 1750s as a shepherd for the king.²⁴ Sixteen-year-old Alexis Pinet also tended cattle for Louisbourg as did Pierre Le Moule and Louis Houry.²⁵

Gardens and menageries ensured that Louisbourg families had self-sufficient food supplies. Hundreds of transactions in the Louisbourg archives document the efforts of Louisbourg residents—from all social backgrounds—to establish *petites ménageries* in Louisbourg harbour and throughout the surrounding countryside. Some individuals shared the cost of keeping their animals. Rand Gillet, for instance, had one cow in 1723 and he paid 1 *livre* 10 *sols* for the right to pasture his animal (CAOM, G², 29 Nov 1725, 178, f 506-08). In a similar fashion, Blaise Cassagnolles sold three cattle to Pierre Benoist, an officer in the garrison in 1732. Benoist put the cattle out to pasture near Louisbourg (CAOM, G², 4 Feb 1732, 184, f 79-80). Eventually, at least one of the animals, a bull, was wintered on De Mézy's menagerie (G², 1732, 181, f 35-44). In the meantime, Benoist had a garden

measuring 34 by 45 *pieds* behind his house in block 2 and another 90 square *pieds* garden in block 22 of the town. Benoist also had farm animals in his block 2 residence and had a half share of an ox and heifer. Benoist's slave Charles tended his animals in town and helped with the gardens (Donovan 2004). By buying three cattle from Cassagnolles, Benoist was further diversifying his food supply, as did Antoine Castaing who sent a cow to winter on Scatary island in 1753 (CAOM, G², 30 March, 212, doss 540, *pièce* 2).

Ordonnateur Jacques Prevost also established a *petite ménagerie* on Louisbourg's north shore during in 1753 in order to raise poultry to provide "some comfort for life which is so difficult here" (AN, CIIB, 19 Dec, v 33, f 427v). With a family of four children and a household staff of ten people, including servants and slaves, Prevost required numerous poultry to keep his house supplied (DCB 4, 645). Governor Jean-Louis Raymond, meanwhile, had also set up his own menagerie on the Mira River, even though he and Prevost had access to the king's garden. Determined to prove that Louisbourg could provide its own food, Raymond's farm was part of a larger experiment in which he paid soldiers to clear land for agriculture and he encouraged soldiers to settle in farming communities, much like the *coloniae* of Roman times, to bolster the island's defences. In 1752 he discharged twenty-two soldiers who were subsequently married and granted land in the village of Rouillé on the Mira River. Other soldiers were settled at Sydney, St. Peter's and on Ile Saint Jean (DCB 4, 656).

These small farms helped to ensure a reliable source of vegetables, milk, eggs, beef and pork and any surplus produce could be sold in Louisbourg. Thus, the surgeon major Jean Baptiste La Grange had land granted for a working farm (*metairie*) at Laurembec in 1727. By 1731 La Grange had constructed a house on the property and at least one gardener/agricultural labourer, Martin Guiar, looked after the farm (CAOM, G², 1742, 198, n 164). On December 31, 1731, La Grange was paid 240 *livres* for vegetables supplied to the garrison (AN, CIIC, v 11, f 49-53). La Grange's menagerie also provided up to 300 quintals of hay per year during the 1750s and was rented for 450 *livres* per year in 1758. Since he had large family of six children, La Grange, like Pierre Benoist, diversified his food supply with properties and gardens in the Barrachois of Louisbourg harbour and in block 11 (Hoad, 255-58).

La Grange, even though he owned a menagerie, was a relatively small vendor, much like Joseph Lartigue, who owned two large gardens and earned 300 *livres* per year selling surplus produce by 1735 (AN, ClIB, v 17, f 290-2). The Louisbourg records abound with sales of animals and foodstuffs from menageries in and around Louisbourg. Judocus Koller, for instance, supplied six live cattle to the king's ship *Le Profond* on 4 October 1741 for 540 *livres* (AN, ClIC, v 12, f 73). Abraham Dugas shipped eight live cattle from St. Peter's to Louisbourg for the king's service in 1750 (AN, ClIC, 13 Sept 1751, v 13, f 107-27). Innkeeper Julien Fizel hired Giles Elain, a shepherd, to tend the animals on his butchery at "fond de la Baye" in 1742 (CAOM, G², 20 Sept, 87, f 10v) and he raised hundreds of cattle and sheep on his menageries at Fourchou and Framboise for sale in Louisbourg (AN, ClIB, 8 June 1746, v 27, f 215-6).

In spite of having a sheep butchery on the north shore of Louisbourg harbour and hundreds of cattle at Fourchou and Framboise, Fizel also kept three cows and a goose on his property in the Barrachois just outside the walls of Louisbourg (CAOM, G², 6 April 1757, 209, n 508). The three cows provided a secure supply of milk for his wife and their six children as well as the guests at his inn on block 16, *Rue Royale*. Other households on the street—approximately twenty in total—thought much like Fizel since there were 13 cows for the 20 properties. The people on *Rue Royale* were part of a comprehensive census, street by street, of the townspeople and their domestic animals, as well as the harbour of Louisbourg in 1752. There were 67 cows, 79 pigs, 142 sheep and 28 horses within the town, many more than the surrounding harbour. Most people, including the elite such as the governor, the *ordonnateur* and the engineer, kept animals in their back yards as part of their *petite ménageries*. Domestic animals were primarily intended to provide sustenance for individual families and, as in the first years of the settlement from 1713 to 1745, livestock had to be imported to provide for the garrison and fishermen.

Together with the census of Louisbourg, Joseph de La Roque also conducted a comprehensive census of the inhabitants and livestock of the 19 villages throughout Ile Royale in 1752. When the census of Louisbourg and the surrounding villages were combined, there were a total of 573 cattle, 232 pigs, 223 sheep, 10 goats and 54 horses recorded among a population of 5,845 inhabitants. Excluding the garrison, there were 4345 people on the island, one cattle for every 7.5 persons, one pig for every

18.9 persons, one sheep for every 18.7 persons, one goat for every 434 people and one horse for each 80 inhabitants. By 1752 the French were still attempting to rebuild their supply of animals and breeding stock after their return to Cape Breton in 1749. All of the properties around Louisbourg harbour as well as the fishing villages throughout Ile Royale—including their livestock—had been destroyed during the 1745 siege.

Conclusion

Research and publication at Louisbourg over the past thirty years have demonstrated that the elite brought their world view, including their aesthetic sensibility, their architecture, their music, their books, their scientific curiosity, their elaborate meals, their fine china, their delicate fabrics, their servants, their slaves, their geometric gardens, their gardeners and the whole range of their cultural milieu to Ile Royale. The gardens in Cape Breton typically began with the movement of soil as the first step in a planned effort to develop fertile soil. The demanding conditions of garden production in Cape Breton called for the imposing of discipline upon nature, part of a broader movement of garden production that began throughout the western world at the beginning of the 17th century.

Louisbourg's gardens, as well as those of the countryside, provided sustenance, in terms of vegetables, for families throughout the year. Besides fortress construction, other government initiatives were part of the movement to impose discipline upon nature. Thus, when the French established two new villages along the Mira River in the 1750s, soldiers were ordered to clear the land for the settlers. A monsieur Denis was also paid for the peas, beans and maize "that he provided in order to seed the land of the inhabitants" along the Mira (AN, ClIC, 1753, v. 14, f 12-42). These gardens, however, were not intended to provide food for the garrison or for large numbers of fishermen, although fishing proprietors and individual fishermen tended their own gardens. The French persisted in their attempt to grow wheat, in spite of the short growing season. Subsequent generations pursued the same ends. In May 1844, for instance, the schooner *John Thomas* departed Sydney for Aberdeen, Scotland, with 800 barrels of flour from James Anderson's steam grist mill: the first shipment of flour to be exported from Cape Breton (Donovan 1990, 98).

The French persisted in growing wheat but they also introduced vegetables such as carrots, cabbages, dock, celery, artichokes, lettuce,

*Inventory of
livestock on Ile
Royale - 1752 (De
La Roque, 3-172)*

Place	Cattle	Oxen	Cows	Calves	Bulls	Goats	Horses	Swine	Sheep
Gabarouse								6	
St. Esprit			10	3			2		
“L’Ardoise “	18	4	17	5	1		4	14	
St. Peter’s	25	39	63	8	2		3	22	
Isle Madame		8	28	16			1	7	
Petit-de-Grat		3	12		1			1	
“R.Inhabitants”		12	23	1	2			9	
Chapel Island		1	2				1	2	6
Grand Narrows		15	13	2				29	10
St. Ann’s			2						
Little Bras d’Or			1		1	3			
Spanish Bay		17	26	7		4	34	11	
Lingan		8	14						
Port Morien		13	23	2			7	13	17
Mira		2	24	10	2	3	2	8	15
Scatarie I.			3	1					
Main-a-Dieu		1	1	1					
Baleine									
Lorraine								4	
Louisbourg	79						34	87	154
TOTAL	122	123	263	56	9	10	54	232	223

turnips, cauliflowers, parsnips, peas, beans, pumpkins, watermelons and potatoes. With their bountiful gardens, Ile Royale citizens practised a highly individualistic agriculture. Yet, at the same time, some aspects of their agriculture were communal since the pastures were held in common and shepherds tended to the animals of neighbours and friends. Communal pastures remained the norm, especially in rural Cape Breton well into the 20th century. The gardens were enclosed and the animals roamed freely throughout the countryside in communities such as Ingonish in northern Cape Breton as late as the 1930s (Gordon Doucette, personal communication).

By the 1750s the French had almost one hundred year’s experience in Cape Breton and Newfoundland growing vegetables under less

than ideal conditions. Louis Petitpas’s behaviour was typical. A French interpreter for the Mi’kmaq, Petitpas, who had a Mi’kmaq mother, lived on Chapel Island, near St. Peter’s, with his Mi’kmaq wife, Madelaine Poujet, and one helper during the 1750s. Petitpas and his helper, 19-year-old Baptiste Roma, spread approximately 646 cubic *pieds* of manure to fertilize the garden (De La Roque, 36). The French had confidence in their ability to transform marginal land into bountiful gardens. The lessons of garden cultivation were hard learned—part of the New World experience—and yet they are still practised in Cape Breton and the French Islands of St. Pierre and Miquelon. The agricultural innovations, part of the Enlightenment, had long-term consequences.

Notes

This paper was delivered at the Atlantic Canada Studies Conference, Memorial University, St. John’s Newfoundland, 2-4 May 2003 and the French Colonial Historical Society, University of Toulouse, Toulouse, France, 14-18 May 2003. Bill O’Shea, the recently-retired head of cultural resources at Louisbourg, commissioned and inspired this study. Judith Romard provided library resources. Vanessa Childs helped with cartographic research and Heather Gillis gave technical support. Special thanks are extended to Sandy Balcom, Deryck Holdsworth and MCR assistant editor Marie MacSween for their critical comments.

1. Journal and Votes of the House of Assembly for the Province of Nova Scotia, 5 July 1775, C.O. 220, vol. 11, p. 196, Public Record Office, The National Archives, Kew, England [PRO].
2. The colony of Ile Royale included the islands of Ile Royale (Cape Breton) and Ile St. Jean (Prince Edward Island).

Louisbourg’s permanent civilian population was 633 in 1720; 813 in 1724; 1463 in 1737; and 2690 in 1752. These figures do not include totals for the garrison, fishermen or other transients who were in the colony on a seasonal basis. By the late 1750s Ile Royale’s population, including soldiers, approached 10,000 people (Johnston 1991, 75-86).

3. Report of St. Marie on Cape Breton, 2 March 1700, *Dépôt des Fortifications et des Colonies* [D.F.C.], F 557, No. 130, Centre des Archives d’Outre-mer, Aix-en-Provence, France [CAOM].
4. La Ronde Denys, “An Account of the Island of Cape Breton,” *English Harbour*, 13 October 1713, CIIB, vol. 1, fol. 24, Archives Nationales, Archives des Colonies, Paris, France [AN].
5. Costebelle to the minister, Placentia, Newfoundland, 27 September, 1713, vol. 3, document 64, Nova Scotia Archives and Records Management [NSARM].

6. The Council to Vaudreuil and Begon, 7 June 1720, B, vol. 42-2, p. 321, National Archives of Canada [NAC].
7. Maurepas to St. Ovide and Le Normant, 16 April 1737, B, vol. 65, fol. 448v - 49v, AN.
8. Anonymous memoir, 1706, CIIIC, vol. 8, fols. 10-39, AN.
9. The French apple trees planted on the Mira and at St. Ann's would have bred true, providing nobody had planted a different cultivar in the vicinity. The saplings taken to the Mira would then be original stock but their progeny could easily have been planted in proximity to other French or New England imports. The next generation could well be the products of various crosses, depending on which apple trees the bees had visited. Pixie Williams, botanist, to Ken Donovan, 6 June 1994.
10. Duck and pigeons sent to France on the *Caribou*, 1744, F 1 A, vol. 35, fol. 41, AN.
11. Louis Franquet, Memoire on Ile Royale, 10 December 1750, *article* 14, *pièce* 24, Comité technique du Génie, Bibliothèque, Paris [Génie].
12. Raymond to the Minister, 3 March 1757, Valonges, France, Series A 1, vol. 3457, *pièce* 9, Archives du Service Historique de l'Armée. For the potatoes imported from Boston, see the unloading of the ship *Le Trialle* from Boston, 16 October 1742, B, 272, f 102v-3, Archives départementales, Charente-Maritimes, La Rochelle, France [ACM].
13. Charles Frost to William Pepperrell, Falmouth, Mass., 12 November 1745, p. 364, Pepperrell Papers, Massachusetts Historical Society, Boston.
14. Clarence d'Entremont, ed., "Major Morris Report on His Raid from Pubnico to Chegoggin, 1758," *Les Cahiers*, Societe Historique Acadien, vol. 2, no.4 (Mars, 1967), pp. 257-72. For the growing of potatoes in Halifax in 1750, see letter of a British officer, Halifax, to Arthur Dobbs, Carrickfergus, Northern Ireland, 13 August 1750, in D 162/50, serial 8911072, PRO.
15. J. H. Bastide to Thomas Hancock, Louisbourg, 30 April 1748, Hancock Papers, Baker Library, Harvard University, Boston.
16. Inventory of the estate of Claude-Joseph Desmarest, 13 April 1741, E 126, fol. 3v., AN.
17. For a garden fence seven *pieds* above the ground, see the 120 *pieds* square garden of Sieur de Boularderie south of Little Bras Bras d'Or., "L'Affaire Le Brun-Boularderie," 27 September 1726, G 2, vol. 180, fol. 365, CAOM.
18. For Heron described as a cook, see the census of 1724 and 1726, G1, vol. 466, *pièces* 67, 68, CAOM; for Heron as a tavern keeper, see land grant concessions in Louisbourg, 1723, CIIA, vol. 126, fol. 111, AN.
19. Marc Antoine de la Foret, Evaluation of the houses and gardens in Placentia, Newfoundland, 27 August 1714, C.O. 194, vol. 5, B 208, fol. 351, PRO.
20. Mascarene to Governor Shirley, July, 1744, Mascarene Papers, Massachusetts Historical Society, Boston.
21. For the rations given to Vadeboncoeur during the months of July, August and September 1742, see 30 September 1742, vol. 24, fols.192-96, A.N., Colonies. For Vadeboncoeur's wedding, see 1 February 1740, G 3, 2046-1, no. 233, CAOM. For granting of land to Vadeboncoeur on 16 June 1742, see 21 October 1743, G 3, 2047-1, *pièce* 52 CAOM.
22. See Francois Boucher, "Carte Des Environs De Louisbourg", 1738, CIIA, vol. 126, fols. 253-54, AN, Colonies: "Carte Des Environs De Louisbourg, 1757," CIIA, vol. 126, fols. 247-8, AN.
23. Plan showing the limits of the governor's menagerie, N.D. (circa 1735-1740) Atlas Moreau de St. Méry, F 3-290, no. 48, CAOM. See also similar plan showing menagerie and cleared land, CIIA, vol. 126, fol. 241, A.N.
24. For Louis Paget, see passengers on the ship *Le Comte de Pontchartrain* for Louisbourg, 1758, AN, CIIIC, F 5 B; for Jean Lambert, see sale of land by Jean Lambert, G 3, 2046, 21 October 1738, CAOM.
25. For Pinet, see G 2, 1742, vol. 198, no. 164, CAOM; for Pierre Le Moule dit Nauger, his wife, two children and servant, see census of returning settlers to Louisbourg, G 1, 1749, vol. 466, no. 76; for Louis Henry, see G 2, 17 November 1755, vol. 205, no. 386, fol. 46.

References

Primary Sources

- Archives départementales, Charente-Maritimes, La Rochelle, France [ACM].
- Archives du Service Historique de l'Armée, Vincennes, France.
- Archives Nationales, Archives des Colonies, Paris, France [A.N., Colonies].
- Bibliothèque Nationale, Paris [BN].
- Centre des Archives d'Outre-mer, Aix-en-Provence, France [CAOM].
- Comité technique du Génie, Bibliothèque, Paris [Génie].
- Hancock Papers, Baker Library, Harvard University, Boston.
- Mascarene Papers, Massachusetts Historical Society, Boston [MHS].
- National Archives of Canada, Ottawa [NAC].
- Nova Scotia Archives and Records Management, Halifax [NSARM].
- Pepperrell Papers, Massachusetts Historical Society, Boston.
- Public Record Office, The National Archives, Kew, England [PRO].

Secondary Sources

- Chancels de Lagrange, Louis. 1959. *Voyage Fait A L'Isle Royale Du Cap Breton En Canada, 1716 Sur La Fregate L'Atalante Commandee Par Monsieur De Courbon St Leger. Revue D'Histoire De L'Amérique Française* X111 (Décembre) 422-34.
- Choquette, Leslie. 1997. *Frenchmen into Peasants: Modernity and Tradition in the Peopling of French Canada*. Cambridge: Harvard University Press.
- [De La Roque, Joseph]. 1906. Tour of Inspection Made by the Sieur De La Roque. In *Report of the Canadian Archives for the Year 1905*, 3-172. Ottawa: S.E. Dawson.
- Denys, Nicolas. [1672] 1908. *The Description and Natural History of the Coasts of North America*. Trans. William F. Ganong. Toronto: The Champlain Society.
- Des Barres, Augustus W. [1818] 1986. A Description of the Island of Cape Breton, in North America Including a Brief Account of its Constitution, Laws and Government. London. In Brian Tennyson, ed., *Impressions of Cape Breton*. Sydney: University College of Cape Breton Press, 73-86.
- Devèze, Michel. 1977. *Antilles, Guyanes, la Mer des Caribes de 1492 B 1789*. Paris: SEDES.

- Dictionary of Canadian Biography* (DCB) 1966, 1969, 1974, 1979, 4 vols. Toronto: University of Toronto Press.
- Donovan, Kenneth. 1990. "May Learning Flourish": The Beginning of a Cultural Awakening in Cape Breton During the 1840's. In *The Island: New Perspectives on Cape Breton History, 1713-1990*, ed. Kenneth Donovan, 89-112; 269-74. Fredericton and Sydney: Acadiensis and University College of Cape Breton Press.
- . 2004. Slaves in Ile Royale, 1713-1758. *French Colonial Historical Society* (5) 25-42.
- . Forthcoming. *Toléré Mais Non Permis*: Gambling, Games and Gaming in Ile Royale, 1713-1758. Atlantic Canada Studies Conference 3-5 May, 2007, St. Mary's University, Halifax, Nova Scotia.
- . 1987. Ile Royale, Eighteenth Century. In *Historical Atlas of Canada: From the Beginning to 1800*, ed. Cole Harris, Plate 24 1 vol. Toronto: University of Toronto Press.
- Du Boscq De Beaumont, Gaston, ed. 1975. *Les Derniers Jours de L'Acadie 1748-1758*. Genève: Slatkine [orig pub 1899].
- Faucher, D. Les Jardins familiaux et la technique agricole. *Annales, Economie, Société, Civilizations* 2 (1959) 297-307.
- Fortier, John. 1972. The Fortress of Louisbourg and its Cartographic Evidence. *Bulletin of the Association For Preservation Technology* 4(1-2): 1-40.
- Fortier, Margaret. 1983. *The Cultural Landscape of Eighteenth-Century Louisbourg*. Ottawa: Parks Canada.
- Gellinas, Cyrille. 1983. *The Role of Fort Chambly in the Development of New France, 1665-1760*. Ottawa: Parks Canada.
- Hoad, Linda. 1976. *Surgeons and Surgery in Ile Royale*. Ottawa: Parks Canada.
- Hyde, Elizabeth. 2005. *Cultivated Power: Flowers, Culture, and Politics in the Reign of Louis XIV*. Philadelphia: University of Pennsylvania Press.
- Jellicoe, Geoffrey and Susan Jellicoe. 2001. *The Oxford Companion to Gardens*. Oxford: Oxford University Press.
- Johnston, A. J. B. 1991. The Population of Eighteenth-Century Louisbourg. *Nova Scotia Historical Review*, II, 2 (December.): 75-86.
- Johnstone, James. 1870. *Memoirs of the Chevalier de Johnstone*. Trans. Charles Winchester. Aberdeen: D. Wyllie & Son.
- Le Roy Ladurie, Emmanuel. 1971. *Times of Feast, Times of Famine: A History of Climate Change Since the Year 1000*. Trans. Barbara Bray. New York: Doubleday.
- Mariage, Thierry. 1999. *The World of André Le Nôtre*. Trans. Graham Larkin. Philadelphia: University of Pennsylvania Press.
- Mabile, Gérard. 1991. The Menagerie at Versailles. In *The Architecture of Western Gardens: A Design History From the Renaissance to the Present Day*, eds. Monique Mosser and Georges Teyssot, 172-74. Cambridge: The MIT Press.
- Mandrou, Robert. 1976. *Introduction to Modern France 1500-1640: An Essay in Historical Psychology*. Trans. R. E. Hallmark. New York: Holmes and Meier.
- Moore, Christopher. 1975. *Commodity Imports of Louisbourg*. Ottawa: Parks Canada.
- Mukerji, Chandra. 1997. *Territorial Ambitions and the Gardens of Versailles*. Cambridge: Cambridge University Press.
- Pichon, Thomas. 1760. *Genuine Letters and Memoirs Relating to the Natural, Civil and Commercial History of the Islands of Cape Breton and Saint John from the First Settlement to the Taking of Louisbourg by the English*. Trans. London: J. Nourse in the Strand.
- Roche, Daniel. 2000. *A History of Everyday Things: The Birth of Consumption in France, 1600-1800*. Trans. Brian Pearce. Cambridge: The Press Syndicate.
- Roche, Daniel. 1998. *France in the Enlightenment*. Trans. Arthur Goldhammer. Cambridge: Harvard University Press.
- Russell, Terence M. and Anne-Marie Thorton. 1999. 2 vols. *Gardens and Landscapes in the Encyclopédie of Diderot and D'Alembert: The Letterpress Articles and Selected Engravings*. Hants, England: Ashgate Publishing.
- Schnapper, Antoine. 1991. Gardens and Collections in France and Italy in the Seventeenth Century. In *The Architecture of Western Gardens: A Design History From the Renaissance to the Present Day*, eds. Monique Mosser and Georges Teyssot, 175-77. Cambridge: The MIT Press.
- Stroup, Alice. 1990. *A Company of Scientists: Botany, Patronage, and Community at the Seventeenth-Century Parisian Royal Academy of Sciences*. Berkeley: University of California Press.
- Tongiorgi Tomasi, Lucia. 1991. Botanical Gardens of the Sixteenth and Seventeenth Centuries. In *The Architecture of Western Gardens: A Design History From the Renaissance to the Present Day*, eds. Monique Mosser and Georges Teyssot, 81-84. Cambridge: The MIT Press.
- Vérin, Hélène. 1991. Technology in the park: Engineers and Gardeners in Seventeenth-Century France. In *The Architecture of Western Gardens: A Design History From the Renaissance to the Present Day*, eds. Monique Mosser and Georges Teyssot, 135-46. Cambridge: The MIT Press.
- Weltman-Aron, Brigitte. 2001. *On Other Grounds: Landscape Gardening and Nationalism in Eighteenth-Century England and France*. Albany: State University of New York Press.

Forthcoming

La revue futures

Articles

Mary Piercey

Representations of Inuit Culture in the Cambridge Museum of Archaeology and Anthropology

Heather King

Allotments in Harlow as Cultural Artifacts

Cynthia Boyd

Sir Frederick Gibberd and the Gibberd Garden on Marsh Lane, Old Harlow, Essex

Peter Ennals and Deryck W. Holdsworth

Looking Backward and Moving Forward: Early House Building Patterns among the Yorkshire Settlers of Chignecto

Research Reports

Bonar Gow

Creating a Past for the Canadian Petroleum Industry's Technology

Exhibition Reviews

Lynn Matte

Liminal Spaces in the Museum of London

Book Reviews

Pierre-Édouard Latouche

Au-delà des frontières. L'architecture des ambassades canadiennes 1930-2005

Caroline Cloutier

Les escaliers publics en fer de la ville de Québec. Entre fonctionnalité et représentation (1880-1900)

S. Holyck Hunchuck

Up North: Where Canada's Architecture Meets the Land

Robin Inglis

A World Inside: A 150-Year History of the Canadian Museum of Civilization

Richard Klein

The Freedom to Smoke: Tobacco Consumption and Identity