T.W. ACHESON

New Brunswick Agriculture at the End of the Colonial Era: A Reassessment

IN NEW BRUNSWICK, AS IN EVERY other part of North America, agriculture was the most important economic activity of the early and mid-19th century. History, however, tends to be a game for winners, and the historiography of the colony is very long on timber and ships and manufacturing and very short on any discussion of the principal economic activity. Much of the reason for this state of affairs stems from the longstanding assumption that New Brunswick was not an agricultural community and that most colonists worked the woods in winter, drove logs in spring, cut lumber in summer and made ships on demand. Agriculture was, at best, a matter of subsistence: a truck garden, a potato plot, a pig for winter killing, and a draft animal for use in the woods. The colonial economy was perceived as driven by its export trade in staples, and its rural society was seen as an undifferentiated mass of part-time lumbermen living on their small undeveloped farm lots.

The traditional historiography suggested that the rural family lived in two interrelated economic worlds: the world of a cashless subsistence agriculture, and the commercial world of the timber trade and the public purse. Arthur Lower drew the classic portrait of the New Brunswick farmer-lumberer in his two studies on the Canadian forest frontier. He characterized such men as the "usual mixture of amateur farmer and timber cutter" who turned from the honest toil of farming to the "illusory promise of an easy cash return for a winter's work in the woods", and for whom the "neglect of their farms ended either in abandonment or in extremely slovenly farming". Even the food consumed in the lumber camps had to be imported from the United States, the Canadas and the West Indies.[1]

Lower's depiction of the province as one vast seasonal lumber camp was accepted and taken for granted a generation later by Stewart MacNutt. MacNutt's history of the colonial period — still the standard work on pre-Confederation political development — is in large measure a study of the politics of the timber trade. Although the great majority of the electorate of the period were farmers and rural freeholders, the terms "agriculture" and "farming" do not appear in the index

1 A.R.M. Lower, *The North American Assault on the Canadian Forest* (Toronto, 1936), pp. 78-9. See also Lower's *Settlement and the Forest Frontier in Eastern Canada* (Toronto, 1936), pp. 31-7. The author wishes to acknowledge the support of the Social Sciences and Humanities Research Council of Canada in the preparation of this study.

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of the work. To Lower's image of the farmer-lumberman MacNutt added the vision of the economically dependent rural freeholder bound to the central government through the dole of public money. Most of the provincial revenues were dispensed through the medium of the local assemblymen for the construction of public roads and other undertakings. The cash income paid for this work in a hundred localities was an essential part of the rural economy.[2] In his 1982 study of the communities of the upper Miramichi River valley, William MacKinnon demonstrated that most freeholders in this timbering centre were active participants in the trade. Taking a theme hinted at in Lower, MacKinnon revealed a community of farmer-lumberer-entrepreneurs who mortgaged their farms to raise the capital needed to speculate in this potentially profitable undertaking.[3] The first suggestion that a prosperous and complex agricultural economy existed at mid-century was made by Graeme Wynn in his *Timber Colony*. He writes of an agricultural economy paralleling that of the forest, of farms sufficiently productive that they rented for as much as £50 a year in the early part of the century, of agricultural labourers making £25 and board each year. Béatrice Craig has found the same variety of agricultural enterprise in the upper St. John Valley in the first half of the 19th century.[4]

The evolution of New England and Canadian rural historiographies has followed a similar pattern. The traditional historiographies of New England and Canada, in different ways, portrayed early and mid-19th-century rural society in a similar fashion. On the one hand, the self-sufficient rural freeholder was seen as the glory of New England and the township as the basis of an egalitarian democracy. On the other hand the ubiquitous wheat farmer of Upper Canada was considered the principal instrument of prosperity, and the export of wheat provided a margin of prosperity that contrasted sharply with the economy created by the largely self-sufficient peasantry of Lower Canada, who thus contributed to the economic backwardness of that society. Recent studies have challenged both these views.

In 1961 Charles Grant challenged the interpretive framework of New England agriculture created half a century earlier by Percy Bidwell. Bidwell had argued that most New England farmers in the 18th and early 19th centuries had been trapped in a narrow subsistence agriculture existing outside the market economy. Grant argued from his township study of Kent, Connecticut that there were, in fact, agricultural surpluses in the region — surpluses that implied the presence of markets. More important, Grant went on to postulate that, far from being a people caught up in an ideal of the perfect life as one of a self-sufficient, family-centred community, his

2 This is a continuing theme throughout MacNutt's work. For specific examples at critical junctures in the political process see W.S. MacNutt, *New Brunswick: A History, 1784-1867* (Toronto,1963), pp. 112, 243.

3 William MacKinnon, *Over The Portage: Early History of the Upper Miramichi* (Fredericton, 1984), ch. 4.

4 Graeme Wynn, *Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick* (Toronto, 1981), pp. 80-4. See also Béatrice Craig, "Agriculture in a Pioneer Region: The Upper St. John Valley in the First Half of the 19th Century", in Kris Inwood, ed., *Farm, Factory and Fortune: New Studies in the Economic History of the Maritime Provinces* (Fredericton, 1993), pp. 17-36.

New Englanders were entrepreneurs committed to achieving the material benefits that aggressive entrepreneurship could acquire.[5]

Grant's concept of a commercial mentality was in turn attacked in the late 1970s by several scholars of the New Left, including James Henretta and Robert Mutch, who argued instead for the existence of an agricultural mentality based on community, family production and mutual benefit.[6] In 1981 Winifred Rothenburg reiterated the presence of "a commercial *mentalité*, an entrepreneurial spirit, an individualist ethic of private gain" in her study of the marketing habits of a number of Massachusetts farmers working between 1750 and 1855.[7] The destruction of the traditional historiographical edifice was completed in 1984 when Bettye Hobbs Pruitt demonstrated that a significant proportion of Massachusetts farms did not possess the most basic farming needs. More than one-fifth of farmers, for example, did not own any draft animals and nearly 40 per cent were not self-sufficient in grain.[8] This suggests an economically divided society and the necessity for extensive local and provincial markets extending far beyond the reciprocal market relationships found in much of the literature of the 1970s.

In contrast to the social democracy traditionally portrayed in New England, Canadian historiography has reflected the all-powerful influence of the staples theory. According to this interpretation the export of wheat was the driving force behind the economic development of Upper Canada. The revenues from this trade created a colony of consumers who generated a greater demand, which led to the development of a more diversified economy. By contrast, the inability to produce a surplus of wheat accounted for the comparative underdevelopment of the economy of Lower Canada. The former proposition recently has come under sharp attack from Douglas McCalla, who argues that the development of Upper Canada (later Canada West) before Confederation cannot be explained in terms of the relatively small per capita wheat exports of the period. Instead, he argues, the commercial

5 Percy W. Bidwell, "The Agricultural Revolution in New England", *American Historical Review*, 26 (July 1921), pp. 683-702; Charles S. Grant, *Democracy in the Connecticut Frontier Town of Kent* (New York, 1961).

6 James Henretta, "Family and Farms: *Mentalité* in Pre-Industrial America", *William and Mary Quarterly*, 3rd Ser., XXXV (1978), pp. 3-32; Christopher Clark, "Household Economy, Market Exchange, and the Rise of Capitalism in the Connecticut Valley, 1800-1860", *Journal of Social History*, XIII (1979), pp. 169-89.

7 Winifred B. Rothenburg, "The Market and Massachusetts Farmers, 1750-1855", *Journal of Economic History* [*JEH*], Vol. XLI, No. 2 (June 1981), p. 313. The dimensions of the debate are set out in the comments of Rona S. Weiss, Michael Bernstein and Sean Wilentz and the rebuttal by Winifred Rothenburg. See Rona Weiss, "The Market and Massachusetts Farmers, 1750-1850: Comment", Winifred B. Rothenburg, "The Market and Massachusetts Farmers: A Reply", *JEH*, Vol. XLIII, No. 2 (June 1983), pp. 475-80; Michael A. Bernstein and Sean Wilentz, "Marketing, Commerce, and Capitalism in Rural Massachusetts" and Winifred B. Rothenburg, "Markets, Values and Capitalism: A Discourse on Method", *JEH*, Vol. XLIV, No. 1 (March 1984), pp. 171-8.

8 Bettye Hobbs Pruitt, "Self-Sufficiency and the Agricultural Economy of Eighteenth-Century Massachusetts", *William and Mary Quarterly*, 3rd Ser., XLI (1984), pp. 339, 352.

agriculture of the colony was much more diverse and significant and the domestic market a more important factor than we have been led to believe.[9]

What McCalla and Pruitt have in common is their affirmation of the significance of local and provincial markets in explaining both the nature of the colonial societies and the development of the colonial economies. McCalla confirms the essentially commercial and proto-capitalistic nature of the Upper Canadian rural economy while Pruitt asserts that Massachusetts rural society, while still clinging to the ideal of self-sufficiency, had to be something much more than a barter system based on a form of use-value. In the communities portrayed by both scholars the social distances among households are potentially far greater than those suggested in the traditional literature. The internal markets, in turn, were capable of generating wealth or at least considerable prosperity for significant elements of the rural community.

The traditional rural historiography of New Brunswick has fallen curiously between the New England and the Canadian traditions. On the one hand, New Brunswick farmers have been depicted as fully a part of the great staples enterprise; on the other, they have been seen as isolated, relatively self-sufficient agriculturalists functioning largely outside the market economy. Several major problems need to be addressed before any resolution of this contradiction is possible. There has been no systematic attempt to come to grips with the popular mentality or mentalities of the rural population of the province. Nor has there been any systematic treatment of the development of the agricultural sector over the course of the 19th century. The emphasis on the timber trade in the writing of provincial history has resulted in the assumption that the province was a perpetual forest frontier, despite the obvious fact that by mid-century there were agricultural districts of new settlement, and of one, two, three and four generations standing.

This study seeks to explore the social and economic nature of New Brunswick agriculture at the end of the colonial era. It assesses the significance of the industry and the potential for the development of agricultural markets. This is accomplished through an examination of the structure of the industry in two parishes of the province. The general argument is that most New Brunswick farmers were rational men and women who engaged in those rural economic activities which produced the highest return for their efforts, whether they be farming, lumbering or weaving. Agriculture was the most valuable sector of the provincial economy, but while much of the output of this industry went to the subsistence of the farm family, there were few farms that could be seen as self-sufficient. Indeed, there was a wide range of producing farms and a significant degree of agricultural specialization. Many

9 Douglas McCalla, "The Internal Economy of Upper Canada: New Evidence on Agriculture Marketing Before 1850", *Agricultural History*, Vol. 59, No. 3, (July 1985), pp. 397-416. For the most recent restatement of the traditional thesis see John MacCallum, *Unequal Beginnings: Agriculture and Economic Development in Quebec and Ontario Until 1870* (Toronto, 1980). For an assessment of the historiography of Lower Canadian agriculture see R.M. McInnis, "A Reconsideration of the State of Agriculture in Lower Canada in the First Half of the Nineteenth Century", *Canadian Papers in Rural History*, Vol. III (1983), pp. 4-49.

farm families saw agriculture as one of several activities. Younger men, in particular, participated in the timber trade when more money could be made through this avenue of endeavour, just as they sometimes went to sea for a time, or, when satisfactory opportunities were not available at home, they emigrated to foreign lands.[10] In contrast, a growing number of farm families at mid-century derived most of their income from the farm by producing surpluses of several commodities, which could be sold on the growing provincial market for agricultural produce.

There is nothing at all exceptional in this argument, except that it has so rarely been applied to the farmers of the period in New Brunswick. Contemporary commentators confirmed what historians would say of these colonial agriculturalists: that they were backward and slovenly, that they generally made the improvident decision to engage in seasonal woodswork instead of tending to what should have been the proper concerns of stable yeomen. This point is made most explicitly in the work of the British agronomist J.F.W. Johnston in 1850, and has been repeated in almost every discussion of the subject by both contemporary commentators and scholars.[11] Of 20th-century scholars only Vernon Fowke defends the offending farmers. He justifies their non-agricultural interests on economic grounds. But he then goes on to argue that the province was not an agricultural colony and suggests that alternative opportunities were much more attractive at the time of Confederation.[12] Neither of these explanations is entirely satisfactory, both because they assume that the whole colonial period was pretty much of a piece during which no significant change occurred, and because they largely ignore the substantial agricultural industry that emerged in many areas of the province. And to the traditional debate must be added consideration of the issue that has been at the centre of recent discussions of New England antebellum agriculture: was the 19th century farmer a community-minded peasant or an incipient capitalist?[13]

The nature and extent of any agriculture is intimately connected to the fertility of the soil. Fertility is a function both of the soil base and of the climatic conditions

10 See, for example, Eric Sager, *Seafaring Labour: The Merchant Marine of Atlantic Canada 1820-1914* (Montreal, 1989), pp. 50-7, 82-96, 137-8; Wynn, *Timber Colony*, pp. 82-6; Allan Brookes, "The Exodus: Migration from the Maritime Provinces to Boston During the Second Half of the Nineteenth Century", Ph.D. thesis, University of New Brunswick, 1978, chs. 4, 5.

11 J.F.W. Johnston, *Report on the Agricultural Capabilities of the Province of New Brunswick* (Fredericton, 1850), especially pp. 127-37. See also Abraham Gesner's assessment in *New Brunswick with Notes for Emigrants* (London, 1847), pp. 237-9.

12 Vernon C. Fowke, *Canadian Agricultural Policy: The Historical Pattern* (Toronto, 1946), pp. 63-6.

13 See Henretta,"Family and Farms", pp. 3-32; J.T. Lemon and J.A. Henretta, "Comments on James Henretta's Family and Farms", *William and Mary Quarterly*, 3rd Ser., XXXVII (1980), pp. 688-700; Rothenburg, "The Market and Massachusetts Farmers 1750-1850", pp. 283-314; Weiss, "The Market and Massachusetts Farmers 1750-1850: Comment", pp. 475-8, and "Reply", pp. 171-3; and Bernstein, "Marketing, Commerce and Capitalism in Rural Massachusetts", pp. 171-8. For the Province of Canada see R.M. McInnis, "Marketable Surpluses in Ontario Farming, 1860", *Social Science History*, vol. 8, no. 4 (1984), pp. 395-416; McCalla, "The Internal Economy of Upper Canada", pp. 397-416; McInnis, "A Reconsideration", pp. 9-49; and MacCallum, *Unequal Beginnings*.

found in an area. A northern extension of the New England Appalachian region, New Brunswick contains an astonishing variety of soils interspersed to the point where a single hundred-acre lot may contain several varieties. Despite this distribution, series of adequate to very good agricultural soils often run through many miles of contiguous countryside. In his report on the agricultural capabilities of the province in 1850, James Johnston predicted that 13 million of the province's more than 18 million acres were capable of producing at least one ton of hay per acre each year (and more than a million acres could each produce two or more tons). Modern agronomy has settled for much more modest estimates of the province's soil capacity. The cool moist climate that characterizes the province through spring and autumn limits the potential for plant growth. It is clear that perhaps half the area of the province is unfit for any kind of productive agriculture. Moreover, many of the soils covering the other half have features that make them capable of sustaining only a limited and inefficient agriculture. These limitations and the importance of the timber industry have led most students of the 19th century, with Fowke, to dismiss the province's agricultural output and potential as largely unimportant. This perception is misleading. There are a number of soils capable of producing good to excellent yields of certain crops. Sometimes these cover extensive areas; more often they extend like thick fingers of ore stretching along intervales or across country. These soils are suited to the growing of grains, potatoes, hay and fruits, and generally made good pasture.[14]

Under these circumstances 19th-century agriculture was almost always a local affair. The nature of agriculture differed so much even between adjoining parishes that it is impossible to speak of the province as a whole, or even of a significant part of it, as being a common agricultural community. Instead, economic specialization occurred rapidly in most parts of the province, typically within a generation of the initial settlement of the parish. In areas where agricultural resources were weak or where access to significant timber resources could be easily found, most farmers engaged in subsistence agriculture. In almost all cases, however, farm-based income was being supplemented by that received for off-farm operations either in the woods or in nearby villages. In older areas of settlement, in areas with good agricultural resources, and in almost any parish near a town or city, some form of commercial agriculture was an important element in the incomes of many and, depending on the time and circumstances, perhaps most farmers. In the earlier part of the century that "commercial" agriculture was often little more than a form of barter with neighbouring farmers and local storekeepers. That situation was changing by mid-century, and while most business was still transacted by account, these increasingly showed cash payments on both sides.

It was the timber trade and the ancillary industries it produced that made possible the economic specialization characteristic of the economy of the province

14 Most of this discussion is informed by the New Brunswick soil survey reports, especially the second report by P.C. Stobbe and H. Aalund, *Soil Survey of the Woodstock Area* (1944), Dominion Department of Agriculture Publication 757, and the fourth report by R.E. Wicklund and K.K. Langmaid, *Soil Survey of South Western New Brunswick* (1953), Department of Agriculture.

by mid-century. Evidence of large-scale trade among the regions of the province is found in the early part of the century. The Tantramar district of Westmorland County — the oldest area of continuous settlement in the province — was producing meat and draft animals for the great timber-producing region of the Miramichi well before 1810.[15] The major provincial market for agricultural produce was the city of Saint John, the principal timber port and shipbuilding centre of the British Atlantic colonies. The growing demands of that market organized the agriculture of the parishes in the valleys of the Kennebecasis and Petitcodiac rivers, as much as 30 miles away from the city, and large volumes of meat, hay, grain and butter made their way each week to the city markets.[16] By mid-century this hinterland extended into the Tantramar. As other significant commercial centres and mill towns developed in the first half of the century, nodules of commercial agriculture developed around them. Sometimes the great demand for foodstuffs in the timber camps and in the towns raised food prices to the point where profitable agriculture was possible in adjacent areas possessing only marginal agricultural capability.

The principal commercial agriculture was found in the parishes where large surpluses of hay and grain and potatoes permitted the raising of small herds of cattle. In part because of its proximity to the American border, the Carleton County area west of the St. John River provided the best illustration of this phenomenon. By the Confederation era these parishes provided large quantities of grain, meat, butter and hay to lumber camps, shipped grain, meat and butter to Saint John and to the fishing parishes of the Bay of Fundy islands 150 miles away, and exported cattle, sheep and oats for the markets of southern Maine and Boston.

Another factor which contributed to the growth of a market economy in the province was the large proportion of the population that either did not live on farms, lived on farm lots but did not consider themselves to be farmers, or lived on farms that supplied only a small part of their food requirements. While the concept of "farmer" was subject to self-definition, it is probable that, by Confederation, no more than 60 per cent of New Brunswickers lived on a piece of land containing at least ten improved acres.[17] In addition, there were a large number of families living

15 "Report on Agriculture", New Brunswick, *Journals of the Legislative Assembly* (1884), pp. 23-5.

16 The regulated farmers market was provided for in the city charter granted in 1785. By mid-century more than 15 per cent of the population of the colony lived in the Saint John area. Feeding this population required a complex system of marketing consisting of farmers who brought their produce to market, and of shopkeepers who purchased their supplies outside the city. Farmers provided both food and firewood. See John S. MacKinnon, "The Development of Local Government in the City of Saint John, 1785-1795", M.A. thesis, University of New Brunswick, 1968, and T.W. Acheson, *Saint John: The Making of a Colonial Urban Community* (Toronto, 1985).

17 There were 31,202 occupants in 1871 but this number included 2,034 who occupied fewer than 10 acres. The population of the province at the time was 285,594. Given an average of six people to a household, this left about 40 per cent of the population in villages, towns, cities and on small country lots. These figures are drawn fron the first Canadian census of 1871. These estimates are confirmed by contemporary observers. See "Agricultural Report", New Brunswick, *Journals of the House of Assembly* (1867), p. 39.

on farm lots of more than one improved acre that possessed neither beasts of burden nor sufficient hay or grain to feed themselves and their livestock. This factor alone would have created an extensive market for food and firewood, most of which could not be met simply by way of local barter.

Estimates of the comparative value of agriculture within the provincial economy are difficult to make since most agricultural produce did not enter into trade. Table One presents a rough statement of commodity output in the province in 1860 using census data, customs reports, weekly market reports and the reports of local agricultural societies. The results reflect the strength of the manufacturing sector — particularly that of the primary and secondary wood-processing industries — which remained comparatively strong when the first Canadian census was taken a decade later. Agricultural output accounted for somewhat less than half the potential market value of commodities produced in the province that year, slightly less than the proportion of the population engaged in agriculture. Perhaps half of the manufactured product — mainly lumber and ships — was exported, and most of the remainder was sold on the provincial market. If any significant portion of farm output entered the provincial market, then it was much more important than has generally been assumed. Table One measures the significance of farm output by assessing the value-added output of the major commodities in the New Brunswick economy. It omits poultry, eggs and hides, important items which were not measured in the census.

The mid-century evidence further suggests that, despite the comments of their critics, New Brunswick agriculturalists were at least as efficient and productive as were farmers in other jurisdictions having similar geographic circumstances. There seems to have been no significant per capita difference in the agricultural output of New Hampshire, Maine, Quebec, New Brunswick and Nova Scotia. As Table Two demonstrates, New Brunswick agricultural output compared favourably with that of all its landward neighbours. Though contemporary commentators complained of the necessity of importing grain, the provincial per capita output of all grains was nearly twice that of Nova Scotia, Maine and New Hampshire, and rivalled that of Quebec. Despite its considerable market value, the production of wheat was small. Soils that could sustain a productive wheat culture were found in several areas of the province, but moisture and growing season combined to make wheat a risky crop and it was grown only as an adjunct to other more reliable crops. Hay, oats, buckwheat, potatoes and roots were the crops of choice and they gave rise to an agrarian emphasis on livestock, dairy, meat and wool. Potatoes, buckwheat and butter were the distinguishing marks of the New Brunswick farmer's diet. And buckwheat, which rarely entered into trade, most distinguished the agriculture. It was found in all the major grain-growing areas of the province and particularly on the most productive farms. Béatrice Craig has shown that buckwheat constituted almost half of all grain output in the Upper St. John Valley by 1850.[18] In 1870 New

18 Craig, "Agriculture in a Pioneer Region".

Table One

New Brunswick Commodity Ouput, 1860

Farm Output	$ Value of Outputs	— $Value of Inputs	=	$ Value Added
Hay *b*	3,241,000			
Meat *c*	2,076,000			
Potatoes *b*	1,697,000			
Oats *b*	1,062,000	Hay *bc*	2,884,000	
Butter/cheese *e*	955,000	Oats *bc*	743,000	
Buckwheat *b*	361,000	Seed *b*	400,000	
Wheat *b*	313,000	Wool	190,000	
Other crops *b*	334,000	Flax	29,000	
Wool *b*	190,000	Buckwheat *c*	72,000	
Cloth *af*	711,000	Turnip *c*	63,000	
Firewood *bd*	964,000	Potatoes *c*	170,000	
Total	11,904,000	—	4,551,000	= 7,353,000
Forest Output				
Timber exports *a*	356,000	Hay	226,000	
Other timber *j*	2,050,000	Oats	106,000	
Total	2,406,000	—	332,000	= 2,074,000
Manufactured Output				
Lumber exported *g*	2,920,000			
Other lumber *g*	490,000	Timber *j*	2,050,000	
Shipbuilding *h*	1,674,000	Lumber	486,000	
Other manufacturng *a*	2,619,000	Other *i*	1,000,000	
Total	7,703,000	—	3,536,000	= 4,167,000
Fisheries Output a	518,000			
Minerals Output a	380,000			

Sources: a) Figures from the 1861 New Brunswick Census, Provincial Archives of New Brunswick [PANB].
b) Calculated from 1860 outputs reported in the 1861 census on the basis of the following average market prices: oats .40/bu., wheat 1.12/bu., barley .73/bu., rye .91/bu., turnips .20/bu., potatoes .42/bu., butter .17/lb., wool .30/lb., buckwheat .40/bu., firewood $4/cord and hay at $10/ton. Timothy actually sold for $12 a ton, but the lower price is used to accommodate poorer quality hay. Inputs were deemed to be costs of hay and oats for horses and oxen, based on Lewis' and McInnis' calculation of 1.8 tons of hay per ox, 1.5 tons of hay and 54 bu. of oats per horse. See F. Lewis and R.M. McInnis, "Agricultural Output and Efficiency in Lower Canada 1857", *Research in Economic History*, vol. 9 (1984), p. 79. Ten per cent of the estimated value of grain and potatoes and one per cent of hay was included as seed input. Hay and oats consumption for horses and oxen were pro-rated over the field crops and firewood on the basis of output. Twenty per cent of the value of oats and 10 per cent of all hay output was assigned to off-farm purposes.
c) Pork outputs were reported in the 1861 census. Beef and mutton outputs were calculated from J.F.W. Johnston's 1850 estimates that one in six cattle were slaughtered each year yielding an average of 500 lbs. of meat. It is assumed that half of all sheep were slaughtered each year and yielded 50 lbs. of meat. All meat was calculated at .65/lb. Input costs included two-thirds of the cost of hay requirements for sheep (.15 ton

per animal) and pigs, all of the hay costs for beef animals and 10 per cent of oxen and milk cows averaged at 1.5 tons per animal. In addition 10 per cent of the provincial oat and potato output, 20 per cent of buckwheat (which had to be boiled first) and 50 per cent of turnip output was assigned to these inputs.

d) Firewood was calculated at 10 cords per farm, the average reported in the 1871 census.

e) The only input assigned to milk cows was the cost of hay at 1.8 tons per animal.

f) Cloth inputs include the cost of wool produced in the province, and cotton and flax imports.

g) Lumber exports calculated from the 1861 Customs House Return. "Other lumber" shown here was used in the construction of sailing vessels, furniture and woodenware. Inputs are estimated costs of timber used in making lumber.

h) Inputs include the value of lumber at $9/m., canvas, cordage, stores, nails, sails and copper sheeting.

i) Inputs are complete and, apart from domestically produced lumber and leather, include only imports of copper, hides, sheet tin, cast iron, pig iron, steel bars, skins, leather, hops and iron bars. An obvious lack is the cost of imported cloth for manufacture in the colony.

j) Estimated value of timber subsequently made into lumber products in New Brunswick at $4.50/m. of spruce logs.

Table Two

Agricultural Commodity Output per Capita

	1850	1860	1870		1850	1860	1870
Hay (tons)				Wheat (bu.)			
N.B.	1.2	1.3	1.2	N.B.	1.1	1.1	.7
N.S.	1.0	1.0	1.1	N.S.	1.2	.9	.8
Maine	1.2	1.6	1.7	Maine	.5	.4	.4
Quebec	.8	.6	1.1	Quebec	3.5	2.4	1.7
Potatoes (bu.)				Barley (bu.)			
N.B.	14.4	16.0	23.0	N.B.	.4	.4	.2
N.S.	7.2	11.6	15.2	N.S.	.7	.8	.8
Maine	n.d.	n.d.	n.d.	Maine	.5	1.3	1.1
Quebec	4.5	11.5	15.2	Quebec	3.5	2.4	1.7
Oats (bu.)				Corn (bu.)			
N.B.	7.3	10.5	10.7	N.B.	n.d.	n.d.	.1
N.S.	5.0	6.0	5.7	N.S.	n.d.	n.d.	.1
Maine	3.7	4.8	3.8	Maine	3.0	2.5	1.7
Quebec	10.1	16.5	12.7	Quebec	n.d.	n.d.	.5
Buckwheat (bu.)				Cheese (lbs.)			
N.B.	3.6	3.6	4.3	N.B.	n.d.	n.d.	.5
N.S.	.6	.6	.6	N.S.	n.d.	n.d.	2.3
Maine	.2	.4	.7	Maine	4.2	2.9	1.8
Quebec	.6	1.1	1.4	Quebec	n.d.	n.d.	.4
Butter (lbs.)							
N.B.	15.8	18.2	18.0				
N.S.	13.1	13.7	18.5				
Maine	15.8	18.6	18.6				
Quebec	10.9	14.3	20.4				

Source: New Brunswick censuses of 1851 and 1861, Nova Scotia censuses of 1851 and 1861, Canadian censuses of 1851, 1861 and 1871, *Historical Statistics of the United States*.

Table Three

Average Butter Surplus per Farm by Parish, New Brunswick, 1860

Butter Output	No. of Parishes
Deficit (under 100 lbs.)	21
Balance (100-150 lbs.)	14
Surplus (150-200 lbs.)	22
Surplus (200-250 lbs.)	19
Surplus (250-300 lbs.)	25
Surplus (over 300 lbs.)	8

Source: New Brunswick Census of 1861.

Brunswick farms produced enough buckwheat to provide 250 loaves of bread, or the pancake equivalent, for every man, woman and child in the province. Pancake was a dietary staple normally consumed several times a week on farms and in the lumber camps, and accounted for much of the 880,000 gallons of molasses that New Brunswickers consumed in 1860.

Discussions of the gross and per capita output of provincial agriculture tell us little of the nature of an industry which by 1870 was found in 29,000 complex local manifestations, gathered into more than a hundred parishes. The role that local circumstance played in the form of agriculture which emerged, and the significance of agriculture in various parts of the province, can be illustrated through an examination of parish butter production in 1860. Average parish output of butter per farm ranged from a high of nearly 400 pounds in parishes as diverse as Southampton, Westmorland and St. Stephen to less than 40 pounds in Caraquet, Saumarez and Hardwick. The largest ouputs were found in parishes with extensive grasslands and grain production, and/or those with significant town markets, and/or those in long-established river valley settlements. The smallest outputs were found in Acadian parishes — 13 of the 21 parishes produced fewer than 100 pounds of butter a year, in parishes where fishing was the dominant activity and in those where frontier timbering still predominated. Thus every North Shore and Miramichi River Valley parish, including those with high grain outputs, kept few cows or cattle and produced only marginal quantities of butter.

In his study of marketable surpluses in the mid-19th-century dairy industry of the northern United States, Fred Bateman demonstrated that farm families in 1860 annually consumed nearly 25 pounds of butter per person.[19] Applying this same standard to New Brunswick at the same period, and assuming the farm household averaged six persons, it appears that the farms in 74 of the 109 non-city parishes of

19 Fred Bateman, "The Marketable Surplus in Northern Dairy Farming: New Evidence by Size of Farm", *Agricultural History*, Vol. 52, No. 3 (1978), p. 354.

the province produced marketable surpluses of butter in 1860. These surpluses ranged from as little as 10 or 20 pounds on average per farm in parishes such as Canterbury to nearly 250 pounds in the more productive parishes such as Wakefield, where the total surplus of the parish's 368 farms amounted to more than 70,000 pounds of butter — enough to meet the needs of more than 4,600 non-farm consumers, according to Bateman's calculations.

Studies of butter or other sorts of commodity output strongly suggest the existence of specialized market-oriented agriculture designed primarily to serve the provincial domestic market in 1860. Generalized parish studies do not allow us to see the range of outputs that occurred among the farms within a single parish, and this range was almost certainly wider than that which existed among the various parishes. This range of outputs at the local level is significant because it adds further support to the arguments that there was a significant domestic market for agricultural products, and that there was a growing body of commercial farmers emerging in the province. Two parishes are studied using the Canadian agricultural census of 1871: St. David's in Charlotte County and Wakefield in Carleton County.

St. David's Parish in southern Charlotte County was one of the older areas of settlement in the province. Most of the parish was covered by a soil identified as Carleton Shaly Loam. Beginning in the southern reaches of Carleton County and extending in an erratic sweep through western York and Charlotte counties, this soil covers 525,000 acres. It is a moderately fertile soil capable of producing good crops of grain and clovers and adequate crops of potatoes and hay. The area's original settlers were Irish-born Americans from New Londonderry, New Hampshire who arrived in 1784. Although nominally Loyalists, they were not favoured by the imperial officials at Fredericton, who suspected their motives, and they did not receive river-front lands on the St. Croix. The interior soils that they received were moderately productive. In the 1830s their offspring were joined by a number of Irish immigrants, mostly Protestant, who were granted lands on a recently opened Crown pine reserve. By 1870 the best lands in the parish had been farmed for four generations. Sustaining soil fertility was becoming increasingly difficult. The population grew rapidly until 1840, shortly before the last of the agricultural lands were granted. By 1870 the population was stagnant, but the number of farms

Table Four

Population of St. David's and Wakefield, 1840-1871

	St. David's	Wakefield
1840	1,609	n.a.
1851	1,681	1,854
1861	1,758	2,060
1871	1,880	2,321

Source: Canada, *Census of 1871*, III.

continued to slowly grow as families tried to provide farm holdings for more than one of their offspring. The people of St. David's had always been fecund and emigration had been heavy throughout the century.

The Parish of Wakefield in central Carleton County was completely landlocked. While a few Loyalists had come at the conclusion of the Revolution and some families from southern New Brunswick and Maine had settled in the area in the early 19th century, the major settling group were Irish Protestant immigrants who moved into Wakefield — which then comprised much of west-central Carleton County — between 1820 and 1850. Isolation and transportation problems at first hindered development of the parish, but by the 1860s the farmers of the parish were exporting significant quantities of surplus grain, butter, potatoes and livestock from their county. The leaders of the Wakefield farming community were in the forefront of the provincial movement to import purebred stock and seed. The most productive soil in Wakefield was Caribou. Caribou was typical of the better soils in the province, and spread in an erratic fashion over 141,000 acres of land in Carleton and York counties. Caribou produced excellent crops of potatoes and good crops of oats, barley, wheat, buckwheat, hay, clover and fruit.

Despite the presence of other soils in both Wakefield and St. David's, every settlement, and indeed almost every farm, was located on land largely covered by the Caribou and Carleton Shaly Loam. The sometimes erratic pattern of settlement in both parishes often reflected the location of these soils. The earliest surveys largely confined settlement to the best soils — a high tribute to the instincts of both surveyors and settlers, who generally managed to claim every island of potentially productive soil straight from the virgin state.

The per farm output of most commodities in St. David's placed the parish in the bottom half of those parishes in which agriculture was the principal activity. Wakefield, in contrast, ranked among the top dozen in the province. Both parishes were overwhelmingly agricultural. Of the 312 households in St. David's, 260 were headed by farmers and another 39 contained members who identified themselves as farmers. The comparable figures for Wakefield were 415 households, of which 324 were headed by farmers and 44 contained members identifying themselves as farmers. The analysis that follows is based on 299 farm units in St. David's and 368 in Wakefield. The two parishes were prototypes of two forms of rural New Brunswick community. Within Wakefield the distinction between farm and non-farm was clearly drawn. Wakefield non-farm households had little occupational connection with the farming community. The farm families, on the other hand, were entirely devoted to agriculture: virtually all working sons of Wakefield farmers were farmers, a reflection of the opportunities and labour requirements of the extensive farming operations in the parish. By contrast, the distinction between farm and non-farm in St. David's was very subtle. Nearly two-fifths of the gainfully employed population claimed not to be farmers, but the great majority of these — 79 out of 116 — were sons or other relatives of farmers and lived in farmers' households.

Table Five documents the results of this enquiry. It is based on the analysis of the outputs of the 299 households in St. David's Parish and of the 368 households in Wakefield Parish that contained farmers or more than one acre of improved land. The table measures the output of each product at the appropriate percentile of the farms in each parish. Two significant differences are obvious in this table, one reflecting the relatively high outputs that characterized Wakefield farms, and the other demonstrating the long distance between the most productive and the least productive farms in each parish. For while the percentiles shown in the table reflect the output of each commodity across all the farms in the parish, the output of the principal products, notably hay, potatoes, butter, oats and meat, remained quite consistent within each farm. The great majority of farms that had butter output falling above the 75th percentile of all farms in the parish, for example, also fell in the same range of farms in the production of hay, oats, meat and wood. Those that did not were almost always found in the 50th to 75th percentile range. Similarly, farms producing any major commodity below the 25th percentile normally produced all major commodities in that range and never fell above the 50th percentile of farms in the production of any commodity. The pattern is not as clear in the output of minor products such as wheat, barley, turnip, cloth, logs and apples. Most farms did not produce these products, so any farm that did so fell in the upper percentiles. At the same time, with the exception of cloth, these minor products were normally produced in conjunction with significant farming operations and were usually found in farms with major outputs ranging from the 50th to the 100th percentile. Large outputs of these minor commodities almost always corresponded to larger outputs of major commodities. This was generally true of cloth as well, although there are several instances where clothmaking was obviously the major activity on the farm.

The distances between the most productive and the least productive farms in both parishes are so obvious and pervasive that, by using the standards of Table Five and the outputs of individual farms, it is possible to identify several different kinds of farms and, by inference, several different kinds of agriculture and probable social statuses. As American agricultural historians have demonstrated, there was a high correlation between improved land and levels of agricultural output. In New Brunswick there was an even closer correlation with hay production — an understandable development in a community where hay often passed as a form of common currency. The farms have been grouped in terms of the degree of autonomy that they could provide for their operators. For the purposes of this discussion, four farm categories have been distinguished, ranging from those able to provide no more than a dwelling and a few basic commodities, to those large diversified agricultural enterprises producing significant surpluses of several products.

About 15 per cent of the farms of St. David's and Wakefield were little more than cottage operations, incapable of sustaining a significant agriculture because they possessed neither horse nor oxen. They are ideally depicted in the 10th percentile column below. These were farms producing only the most basic

Table Five

Range of Agricultural Outputs, St. David's and Wakefield Parishes, 1870

Product		Percentile						
		10th	25th	Median	75th	90th	100th	No.
Improved land	D	15	30	40	60	75	200	299
(acres)	W	4	30	50	80	100	250	368
Horses and oxen	D	0	1	1	2	2	6	
	W	0	1	2	2	3	5	
Hay (tons)	D	3	6	10	15	24	60	
	W	0	5	14	20	35	100	
Oats (bu.)	D	0	10	30	70	100	500	
	W	0	100	300	500	700	3,200	
Potatoes (bu.)	D	20	60	100	200	250	900	
	W	15	100	200	400	600	1,500	
Butter (lbs.)	D	50	100	200	250	400	1,000	
	W	0	100	250	400	600	1,300	
Wool (lbs.)	D	0	11	23	35	48	175	
	W	0	15	35	50	78	120	
Cattle kill (head)	D	0	0	1	2	3	13	
	W	0	1	3	4	6	18	
Swine kill (head)	D	0	1	2	2	2	100	
	W	0	1	2	4	7	49	
Sheep kill (head)	D	0	1	4	7	12	25	
	W	0	1	6	10	17	41	
Firewood (cords)	D	8	10	12	15	20	150	
	W	10	12	15	20	30	200	
Buckwheat (bu.)	D	0	0	8	20	30	85	
	W	0	30	100	150	205	1200	
Wheat (bu.)	D	0	0	0	6	15	33	
	W	0	0	13	35	55	159	
Barley (bu.)	D	0	0	0	0	20	50	
	W	0	0	0	0	0	40	
Turnip (bu.)	D	0	0	0	15	50	650	
	W	0	0	0	0	30	400	
Cloth (yds.)	D	0	0	0	0	30	1,384	
	W	0	0	0	70	140	800	
Apples (bu.)	D	0	0	0	6	20	150	
	W	0	0	0	15	30	400	
Logs (no.)	D	0	0	0	0	0	800	
	W	0	0	0	0	30	40,350	

Source: Canada, 1871 Manuscript Census.

commodities seen as essential to life in rural New Brunswick: eight cords of firewood (enough to heat a modest dwelling) and 30 to 50 bushels of potatoes. It is interesting to note that the marginal St. David's farm was considerably more productive than its Wakefield counterpart — it usually produced some hay and supported a cow. Even the most rudimentary ploughing or woodhauling would require the assistance of others in the community, although at least one elderly St. David's farmer, the census-taker reported, ploughed the potato field and the truck garden for himself and his wife using their milk cow. The greater age of the St. David's community is reflected in the large quantity of improved land found on even the meanest farm. An old couple or a single young man or woman might eke out a living here. Most occupants, however, earned the greater part of their livelihood off the farm.

The greater diversity of output in St. David's reflects the more limited opportunities for employment off the farm. There is some evidence that the cottage farmers were younger than those on the more productive farms, but for many of middle age this category of farm was probably a way of life. Typical of this group was James Webber, a 36-year-old Irish New Brunswick Anglican, who lived with his wife and three children on 30 acres next to his father's farm in St. David's. Although he had neither horse nor oxen, nor waggons, nor ploughs, Webber kept a cow and a pig, raised 30 bushels of potatoes, and cut three tons of hay and 10 cords of firewood. His wife made 50 pounds of butter over the course of a year. His Wakefield counterpart was James Muldoon, a 40-year-old Irish Catholic who grew 100 bushels of oats, 80 bushels of potatoes and cut 15 cords of firewood. He kept no livestock. He lived with his wife and four daughters on 10 cleared acres. Farmers such as these had to make the most of their living by bartering or selling their labour.

The second category of farm, characteristic of perhaps 20 per cent of the farms in each parish, consisted of fully developed farming operations containing typically 20 to 30 cleared acres, a horse or oxen, a pig, a few cows and sheep, producing sufficient hay to feed the stock in normal conditions, and potatoes and firewood adequate for all farm household needs. There was one critical difference between the farms of this type in the two parishes: the Wakefield farms produced adequate quantities of oats and buckwheat to make them self-sufficient in grain, whereas St. David's farmers had to acquire part of their requirements. Wakefield farms at this level could be largely self-sufficient or could produce sufficient surpluses to allow the farmer to make modest off-farm purchases. Even under optimal conditions the St. David's farmer would require a small off-farm income. These were marginal farms capable of supplying most family needs at a modest level.

Wesley Robinson, 32, reflected the St. David's model of this group. Robinson lived with his wife, daughter and mother on 17 cleared acres, where he kept a horse, two milk cows, several meat cattle, sheep and pigs. To feed this stock he had only nine tons of hay, 12 bushels of oats and 16 of turnips, which meant that he either had to slaughter most of his meat cattle each fall or buy hay to keep them over the winter. He raised enough wheat (six bushels), barley (10 bushels), and buckwheat

(two bushels) to produce three or four barrels of flour. The farm produced 150 pounds of butter, 12 bushels of apples and 12 cords of firewood, all of which would have been consumed by the family. His 13 pounds of wool could have been sold or exchanged for woollen cloth. Only the 100 bushels of potatoes and the 1,300 pounds of meat provided any clear surplus of output. Finally, the family's other vegetable needs would have been met from the acre-sized garden that Robinson kept. The farm provided a living, but only just. Robinson's material condition thus reflected that of nearly a third of the farm families in St. David's.

The farms of Robinson's Wakefield counterparts were less numerous — fewer than 15 per cent of all farmers — and their farms were generally less diversified. James Gardner, 64, kept a horse, two milk cows and several sheep and swine on his 20 cleared acres. He was certainly self-sufficient in grains (150 bushels of oats and 100 bushels of buckwheat), meat and dairy produce, had a small surplus of potatoes (100 bushels) and wool (30 pounds), and may even have had a small surplus of hay (13 tons). Six people lived on this farm, and the lack of waggons and ploughs strongly suggest that off-farm work would have been part of their lives.

The third and most common category of farm varied considerably in size —from perhaps 40 to 70 improved acres — and comprised one-third of the farms in Wakefield and considerably more than 40 per cent of those in St. David's. They possessed all of the resources of the farms described above, but in greater quantity. In addition, they also produced some quantities of the minor commodities. Typically, they contained one or two horses, three to six milk cows, beef cattle and a dozen sheep. In St. David's they generally produced enough grain to provide for their own needs and in Wakefield they produced grain surpluses. Farms in both parishes had surpluses of butter, wool and potatoes. Most of these farms were also more diversified than the smaller farms, often raising small quantities of fruit and sometimes manufacturing cloth. A number of them employed fanmills, rakes, mowers and threshers. Any off-farm income — when winter employment was available in St. David's — would have significantly raised the standard of living of these farm families.

A typical St. David's farmer from this group was George Young, 34, of Loyalist origins, a third-generation inhabitant of the parish. He and his wife Annie lived with their daughter and two other children on 90 acres of cleared land. They had two horses, were self-sufficient in hay, wheat, buckwheat, barley, turnip and apples, and raised small surpluses of potatoes and butter. Their butter output was smaller than most farms in this group, largely because they devoted the resources of the farm to meat production. They possessed extensive meadows and produced significant surpluses of meat and wood, slaughtering two cattle, 24 sheep and 11 pigs in 1870.

Young's Wakefield counterpart, William Tracy, produced similar quantities of hay (16 tons), wheat (60 bushels), buckwheat (100 bushels) and apples, but raised neither sheep nor beef cattle on his 50 cleared acres. Instead, he and his wife and one child produced significant surpluses of butter (400 pounds) and oats (400 bushels). The household meat and clothing needs were largely met from the slaughter of four pigs and from the 50 yards of woollen cloth made on the farm.

The most productive farms comprised about 35 per cent of those of Wakefield and 10 per cent of those of St. David's. In the framework of eastern North American agriculture in 1860-70 these were large farms, normally producing large surpluses of several commodities. Sometimes they were highly specialized in output, but more often employed both men and women in generating a variety of products for the market. They normally had at least two adult males working on the farm and usually employed some combination of hay-rakes, mowing machines, threshing machines and fanmills. These were large dairy and meat-producing operations. St. David's farms averaged the same number of cows that Bateman found on the farms of the northern United States of the same period. Wakefield farms averaged 30 per cent more cows than their American counterparts, and those farms with more than 49 cleared acres in particular would have been comparable to the most productive dairy townships in the northern United States.[20]

Farm machinery was extensively employed by this fourth category of farmers. This reflected both their extensive labour needs and their ability to purchase these important instruments. Machines were employed most extensively in Wakefield, where nearly two-thirds of all farmers owned fanmills, and one-third owned hay-rakes. Most of the fourth category of farmers, in addition, had mowers and threshers.[21] The proportion of farmers utilizing at least one of these instruments was of course larger than the proportions given here. One of the larger Wakefield farms, though with an operation similar in kind to that of a third of the farmers in the parish, was owned by Elijah Briggs. Briggs, 64, his wife, three daughters and two sons farmed 150 acres on which they produced 100 tons of hay, 1,100 bushels of oats, 300 bushels of buckwheat, 159 bushels of wheat, 800 bushels of potatoes and 100 bushels of apples. Their 12 milk cows produced 850 pounds of butter. In 1870 they slaughtered eight cattle, 18 sheep and 11 swine, made 200 yards of cloth from their own wool and cut 35 cords of firewood. They had very large surpluses of every commodity that they produced. To assist their extensive undertaking they employed five horses, five waggons, six ploughs, two mowing machines, a hay-rake, a threshing machine and a fanmill.

Briggs' St. David's counterpart, William Leaver, 51, had a smaller but still very extensive operation. Leaver, his wife, daughter and two sons used four horses to farm their 110 cleared acres. They produced large quantities of hay (35 tons), oats (300 bushels), potatoes (400 bushels) and small quantities of wheat, buckwheat and turnip. Like most St. David's farmers, Leaver specialized in livestock. His wife produced more than 1,000 pounds of butter a year, and used some of the very large wool output to make 100 yards of cloth. Leaver slaughtered 22 cattle, 22 sheep and one swine — perhaps 12,000 pounds of meat. In addition the Leavers cut and hauled 800 logs, making them the largest lumber producers in the parish. They too employed a mowing machine and a hay-rake.

20 For example, Wakefield farms of over 100 cleared acres averaged 8.5 cows compared with the American average of 6.1. See Bateman, "The Marketable Surplus", p. 351.

21 Canada, Manuscript Census of 1871, Charlotte County, St. David's Parish, Schedule 3, and Carleton County, Wakefield Parish, Schedule 3, Provincial Archives of New Brunswick [PANB].

Many factors seem to have accounted for the range of agricultural productivity both between the parishes and within each parish. Certainly, variations in soil fertility account for much of the difference between Wakefield and St. David's. Location within each parish was also a factor. Those St. David's farms nearest the prosperous urban areas of St. Stephen were highly productive despite being located on less fertile soils than farms in the interior of the parish. The most productive farms were clustered together, even when soil and location were not the best, suggesting that emulation or relationships among a number of families in the area were important. Commentators of the period noted that the background of the farm families was important: British immigrants made better farmers than did the American Loyalists or the Acadians. The importance of background is confirmed in these parishes to a point, although much of the difference is reflected in strong preferences for certain crops.

If the structure of agriculture found in St. David's and Wakefield was at all representative of the agrarian province at large — apart from the fishing and frontier communities — then it seems clear that there was no single provincial agriculture or simple definition of farmer. The concept of the self-sufficient farmer, as Bettye Hobbs Pruitt demonstrated for Massachusetts, was probably a pervasive ideal, or ideology, rather than a reality. New Brunswick agriculture has traditionally been characterized as subsistence. There was a stratum of farms that fit that description, provided it is understood that subsistence farmers frequently engaged in small-market exchanges with local store-keepers. The second category of farms — about a third of the total — might, for this purpose, be considered "subsistence" in that more than 90 per cent of farm output was consumed by the farm household and the farm could provide most of the basic necessities of life and sustain the household in a "retreat from the world" during short periods of economic adversity. The first category of farmers, by contrast, secured their living off-farm either in woodswork or on the farms of their kinsmen or neighbours. Some had prospects if they were young men such as James Webber, developing their lots or anticipating the probability of an inheritance. Mature proprietors at this level, however, were farmers in name only. All members of this class participated in a market economy, consuming more than they produced and working out the difference through contractual relations with storekeepers, lumbermen and other farmers.

Half of the farms in St. David's and more than two-thirds of those in Wakefield produced surpluses — of a variety of products ranging from hay, oats and potatoes to meat. butter, firewood and cloth. In most cases they were clearly selling or trading more than half the output of one or two products; in many cases they were disposing of more than half their entire output off-farm. What were the motives behind the decision to produce these surpluses? Were they inspired by a desire for personal aggrandizement? Did it "just happen"? Or was it, as Daniel Vickers has recently suggested, inspired by a desire to create "competencies" — basically a respectable livelihood for their children.[22] Vickers argues a position between

22 Daniel Vickers, "Competency and Competition: Economic Culture in Early America", *William and Mary Quarterly*, 3rd Ser., Vol. XLVI, No. 1 (1990), pp. 1-28.

Henretta and Clark: that antebellum Americans pursued comfortable independence for their families and in the process of accumulation moved from household production into the world of capitalist relationships. A version of the competencies thesis has provided the principal explanation for the agricultural development of 19th-century Ontario.[23]

This is a persuasive argument and a possible explanation for the development of a market-oriented agriculture in mid-19th-century New Brunswick. It may not, however, have been a necessary precondition for many farmers. By 1870 the province had been the centre of a major, heavily capitalized trans-Atlantic timber trade for nearly 65 years. The critics of the mid-century trade were particularly concerned about its risk-taking nature and the poor values it taught. By mid-century, as well, the dominant element among New Brunswick farmers were not colonial Americans but British immigrants, and Irish Protestants were particularly well-represented among the larger producers. The progressive philosophy of the increasingly important agricultural societies bespoke the influences of the Enlightenment. Even more significant was the operational structure of the larger producers. These were complex organizations requiring a high degree of integrated and disciplined activity, as well as a conscious determination to produce for a market. Moreover, while children ordinarily inherited property on the demise of their parents, there is little evidence that the parents consciously attempted to provide for their children in their lifetime, or that the more productive farmers were more conscientious in this regard than the less prosperous. The notion that prosperity passed through the generations is not supported by close examination. One case study of this will suffice.

The Youngs had been one of the earliest settlers of St. David's. Three Young brothers had settled in the parish by 1797. In 1870 there were nine families containing 38 people in the clan. They owned almost contiguous farms in one of the more fertile areas of the parish. The Youngs came from a common colonial American tradition, and were all Methodists. The head of the clan in 1871 was 82-year-old Jacob Young, a long-time Justice of the Court of Common Pleas and one of the largest landowners in the parish. Significantly, while the clan was more prosperous than the population at large, they were scattered across all the social strata of the parish. Jacob and his unmarried son operated a fourth-level farm. George (60), Charles (52), William (71) and George (34) owned third-level farms. The brothers Levi (35), Amos (27) and Jacob E. (56) had second-level farms. Hill (28), the son of William, lived with his wife, two daughters and two brothers on an undeveloped piece of land beside his father's farm. Various explanations can be offered for the variety of holdings farmed by these second, third and fourth-generation family members, but it is clear that the provision of farm competencies for offspring was not among them. In 1851 the older Jacob, then 62, had three adult sons and four younger daughters living at home. The two older sons,

23 See, for example, David Gagan, *Hopeful Travellers: Families, Land and Social Change in Mid-Victorian Peel County, Canada West* (Toronto, 1981).

William, a trader, and Thomas, a sailor, married young women from St. David's (the third never married) and soon left the countryside altogether. Three of the four daughters followed suit. The seven Young families in St. David's in 1851 had 42 children living with them at that time; 12 of these remained in the parish in 1871.[24] Jacob E. Young and his wife Margaret had five children at home in 1851; by 1871 all five had left St. David's, and they had six more living at home. This rapid circulation of youth out of the community suggests that by mid-century parental and structural influences were perhaps not as clearly dominant as they might once have been.

Another factor that raises important questions concerning the motives behind the significant agricultural surpluses produced on certain farms was the use of wage labour by the leading farmers of the parish. Jacob Young normally kept a live-in labourer. In 1851 he employed a 46-year-old American. But the practice was common at least as early as 1813 when James Brown worked through a series of fixed-term contracts over a number of years in return for cash wages.[25] And to this must be added the explicitly market-oriented rhetoric of the agricultural societies from 1820 onward. At the very least, this evidence suggests the existence of a group of rural proprietors committed to trading relationships designed to yield profits and possessing a will to engage in any opportunity that furthered this prospect. The interesting question is why some of these men seem to have been so motivated while others were not.

There was, therefore, a growing capitalist agriculture dominated by men who resemble Winifred Rothenburg's farmers. And there was a class of relatively independent yeomen who had considerable choice about whether to concentrate their efforts on agriculture or pursue more profitable avocations while maintaining a secure livelihood on their own homestead. And there was a class of marginal agriculturalists who counted farming as one part of a team of undertakings and who were probably respectable but always a little poor and somewhat insecure. And there were groups for whom family and community support were critical to their decisions to remain and in their ability to survive. Finally, there were the cottars of the community, distinguishable from the odd hired hand only in that they possessed the gentility that attached itself to the ownership of land. But that did not fool anybody. They may have found themselves there as a result of bad luck, bad health, bad judgement or lack of opportunity. It did not matter. If they could neither improve their condition nor rely on kith or kin to help them, in a short time they became the unspoken underclass of the community, objects of mild contempt, not considered even a very effective reserve supply of labour. For while this rural people were friends and relatives and part of a functioning community of informal relationships, they were also, at bottom, a people who held individuals accountable for the state in which they found themselves.

24 New Brunswick, Manuscript Census of 1851, Charlotte County, St. David's Parish, PANB.

25 James Brown Papers, MC 295, MS 2, PANB.

The intricate sets of relationships that are implied in these communities offered opportunities both for advancement for the individual and for exploitation of others, with the latter sometimes resulting directly from the former. The wide range of prosperity and poverty inferred from the study of individual farms suggests that most farmers were engaged in the market economy, that many farmers had the capacity to accumulate capital from the output of their agricultural activities, and that many less productive farmers would have been forced to participate in a wide-ranging network of exchange in order to survive. It is difficult to conceive of any large group of farmers by 1870 who were not drawn into the market economy as either producers or consumers, and usually as both. At the same time the present study tells little of the mentalities that motivated farmers at any strata of either rural society. It may well be that many farmers — especially from the first two categories of farms — were part of a closely knit community in which bonds of kinship and tradition produced a willingness to remain in a culture of "making do" and "getting by" with the farm, the woodlot and the odd job. Standards of living in most communities of the province had been rising in the 1850s and 1860s, a fact reflected in the sharp increase in provincial imports of fine wheat flour in the period.[26] The growth and diversification of secondary industry and transportation facilities produced a growing demand for food and drew more New Brunswickers into a cash economy.

New Brunswick farmers responded to the opportunities they perceived in the mid-19th century and exploited — sometimes quite efficiently — the natural and human resources they had at their disposal. Their exploitation of their agricultural resources compared favourably with that of their New England neighbours, whose circumstances most closely resembled theirs, and with whom they shared a common environment and often a common heritage.

26 A clear indicator of the relative prosperity of the colony is found in the quantity of wheat flour imports. These fluctuated wildly from year to year, dependent, in large measure, on the state of the economy. Imports of flour and flour equivalents, assuming five bushels of wheat to a barrel, were 87,000 barrels in 1839, 116,000 barrels in 1845, 144,000 in 1851, and 210,000 in 1861. Only small amounts were exported in each of those representative years. The per capita consumption of fine wheat flour in New Brunswick rose from .56 barrels in 1840 to .83 barrels in 1861. See the New Brunswick Customs House Reports published each year in the *Journals of the House of Assembly.*