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## Late Eighteenth-Century Agriculture on the Bay of Fundy Marshlands\*

Until the expulsion of the Acadians from Nova Scotia in 1755, the borderlands of the Bay of Fundy formed the core of settled Acadia. Extensive tidal marshlands in the Annapolis and Minas Basins and Chignecto, on Shepody Bay, and along the Memramcook and Petitcodiac Rivers were the nuclei of Acadian settlement and the focus of Acadian agriculture. From these dyked and reclaimed lands the Acadians produced a large part of their subsistence requirements, as well as stock and grain for trade with Louisbourg and New England. At mid-century, fields of wheat, peas, oats, rye, barley, and hay covered perhaps 13,000 to 20,000 acres of marshland; tiny hamlets on the upland fringes of the marshes housed some 10,000 people; and kitchen gardens and orchards surrounded simple wooden houses, barns, and churches.<sup>1</sup> Charles Morris, the Surveyor-General of Nova Scotia, who in 1748 visited Beaubassin, at the head of the Bay, provided perhaps the most succinct contemporary account of the distinctive cultural landscapes of these Fundy marshlands in describing:

a Number of Villages built on gentle rising Hills interspers'd with Gardens and Woods the Villages divided from each other with long intervalls of marshes and they at great distance bounded by Hills covered with Trees the Natural growth of the Country [...] here may be seen rivers turning and winding among the Marshes then Cloath'd with all the variety of Grain.<sup>2</sup>

In the wake of the *grand dérangement*, however, both Acadian marshlands and neighbouring uplands were largely abandoned. Although British garrisons remained at Port Royal in Annapolis, at Fort Lawrence and Fort Cumberland in Chignecto, and at Fort Edward in the Minas Basin, settlement on the Fundy lands was extremely sparse until the 1760s.<sup>3</sup> Then New Englanders, attracted by

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- 1 Andrew H. Clark, *Acadia: The Geography of early Nova Scotia to 1760* (Madison, 1968) offers the fullest treatment of Acadian settlement. For a succinct summary see R.C. Harris and J. Warkentin, *Canada Before Confederation* (Toronto, 1974), pp. 25-32.
- 2 [Charles Morris], "A Brief Survey of Nova Scotia", MG18 F10, Public Archives of Canada [hereafter PAC].
- 3 J.B. Brebner, *The Neutral Yankees of Nova Scotia: A marginal colony during the Revolutionary Years* (Toronto, 1969), pp. 1-18.

Governor Lawrence's favourable descriptions of the former Acadian lands, moved in to Nova Scotia.<sup>4</sup> From small beginnings — there were perhaps 270 settlers in Amherst, Cumberland, and Sackville townships in 1761 — populations increased slowly during the 1760s. Yet at the end of the decade, Chignecto's population of perhaps 800 people was less than half that of 1750. Elsewhere the situation was little different. Settlers from the English county of Yorkshire, and Loyalists from the newly independent states to the South came to the Fundy area in the 1770s and 1780s, but the contemporaneous out-migration of many of the New England settlers slowed the rate of population increase. In the last decade of the century there were probably no more than 7000 settlers in the former Acadian lands.<sup>5</sup>

Generally, contemporary commentators were critical of the way in which these settlers farmed their lands in the late eighteenth and early nineteenth centuries. According to many accounts, "English" use of the marshlands compared unfavourably with that of the Acadians. In 1784, for example, the army engineer Colonel Robert Morse regarded the marshlands of Cumberland as "extremely neglected", because they were "mostly in meadow" although they had borne "vast quantities of wheat and other grain" before 1775.<sup>6</sup> In similar vein, the early settler Moses Delesdernier recalled that the Acadians "sold great quantities [sic] of Grain and Cattle and where [sic] well supplied with every common necessary of life", and suggested that if the late eighteenth-century inhabitants "would adopt some of their [i.e., Acadian] practice in Carrying on their business, the country would be very much benefited thereby".<sup>7</sup> On the basis of such observations, several scholars have concluded that post-expulsion settlers in the Fundy basin were unable to use the marshes as effectively as their Acadian predecessors. The New Englanders' use of the marshland for pasturage and hay has been contrasted with the Acadians' production of a wide range of crops from the same lands. The newcomers, it has been argued, "did not under-

4 Lawrence's proclamations are reprinted in W.O. Raymond, "Colonel Alexander McNutt and the pre-Loyalist settlements of Nova Scotia", Royal Society of Canada, *Proceedings and Transactions*, 3rd Ser., 4 (1911), Sect. 2, p. 80. See also J.B. Brebner, *Neutral Yankees of Nova Scotia*, pp. 19-40; A.W.H. Eaton, "Rhode Island settlers on the French lands of Nova Scotia in 1760 and 1761", *Americana*, 10 (1915), pp. 1-43; R.G. Huling, "The Rhode Island emigration to Nova Scotia", *Narragansett Historical Register*, 7 (1889), pp. 89-135; J.S. Martell, "Pre-Loyalist Settlements around the Basin of Minas" (unpublished MA thesis, Dalhousie University, 1933).

5 W.F. Ganong, "Origins of settlements in the Province of New Brunswick", Royal Society of Canada, *Proceedings and Transactions*, 2nd Ser., 10 (1904), Sect. 2, pp. 3-185; [S. Hollingsworth], *The Present State of Nova Scotia* (Edinburgh, 1787).

6 Colonel Robert Morse, "A general description of Nova Scotia written while making a survey of the colony as chief engineer in America 1783-1784", King Mss, MG21 E4, ff. 208-9, PAC.

7 Moses Delesdernier, "Observations on the progress of agriculture in Nova Scotia and New Brunswick", MG21 E5, Add. Mss 19073, f. 128, PAC.

stand the management of the marshland soils"; in Chignecto, they "lacked the skill and labour to redeem the dyked marshlands upon which the Acadians had lavished so much energy"; in Annapolis County, "the marshes were left unused" after 1755. In sum, "the technology of dyked land farming was unfamiliar to the Yankees and they concentrated on trying to farm the uncharitable soils of the lowland patches back from the sea".<sup>8</sup> Indeed, local historian W.C. Milner's celebration of Tolar Thompson as "the first English marsh builder" for his reclamation of land in Chignecto between 1815 and 1820 well illustrates the widespread perception that post-expulsion settlers had great difficulty in mastering techniques in which the Acadians were proficient.<sup>9</sup>

The argument which follows challenges this assumption. In brief, it contends that in the basic matter of dyking technique, continuity rather than hiatus marked Fundy marshland agriculture in the second half of the eighteenth century. After reviewing Acadian dyking methods, evidence of post-expulsion marshland reclamation is presented; without denying the skill and judgement required to cultivate the marshlands, this demonstrates that the difficulties of dyke construction and marsh reclamation were not insuperable for those who settled the former Acadian lands after 1755. Furthermore, an examination of the context of post-expulsion marshland farming reveals that adverse contemporary comparisons of "English" and Acadian cropping patterns were misleading because they ignored crucial questions of market demand, population size, and subsistence requirements.

Acadian agriculture depended upon the reclamation of tidal land from the sea. In the seventeenth century, this was achieved by aligning mud embankments or levees — nothing more than roughly triangular piles of large sods cut from the salt-marsh — along rivers or creeks. Provided that these simple dykes were run between local high spots, or extended inland well above the head of tide in the river, they were sufficient to prevent the tidal inundation of small tracts of land. More extensive reclamation required provision for the drainage of fresh water from the dyked area and, for this purpose, the Acadians introduced the *aboiteau*. This was, essentially, a sluice through the dyke whose clapper-gate valve allowed run-off and ground-water to drain away as the tide fell, but which prevented the ingress of salt-water at the flood. Where *aboiteaux* were built, more elaborate construction techniques were required, and logs and spruce brush were incorporated into the adjoining dyke — as they were to strengthen the larger, longer dykes built in the eighteenth century. Otis Little, a New

8 J.B. Bird, "Settlement Patterns in Maritime Canada, 1687-1788", *Geographical Review*, 45 (1955), p. 398; Brebner, *Neutral Yankees of Nova Scotia*, p. 97; A.H. Clark, "The Canadian Habitat", in R.H. Buchanan, Emrys Jones and Desmond McCourt, eds., *Man and His Habitat* (London, 1971), p. 244.

9 W.C. Milner, *History of Sackville, New Brunswick* (Sackville, 1934), p. 177; W.C. Milner, "Records of Chignecto", *Nova Scotia Historical Society Collections*, 15 (1911), p. 74.

Englander who lived at Annapolis Royal in the 1730s, described the common form of Acadian dykes in 1748: "their Dykes are made of large Sods of Marsh cut up in square Pieces, and raised about five feet higher than the common Surface, of a competent Thickness to withstand the Force of the Tides, and soon grow very firm and durable, being overspread with Grass, and have commonly Foot-paths on their Summit".<sup>10</sup> Earlier, the Sieur de Dièreville, a French visitor to Port Royal in 1699, had chronicled the construction of a more complex dyke and *aboiteau*:

five or six rows of large logs are driven whole into the ground at the points where the tide enters the Marsh, & between each row, other logs are laid, one on top of the other, & all the spaces between them are so carefully filled with well-pounded clay, that the water can no longer get through. In the centre of this construction, a Sluice is contrived in such a manner that the water on the Marshes flows out of its own accord, while that of the Sea is prevented from coming in.<sup>11</sup>

Basically, then, both dyke and *aboiteau* were conceptually simple; a good deal of labour was required in their construction, but once built they allowed the Acadians to put the fertile and easily worked marshland soils to varied use, and to "supply amply their relatively simple needs and wants".<sup>12</sup>

The Acadian adaptations to the unique Fundy environment provided a ready model for emulation by post-expulsion settlers. Indeed, the bases of "English" familiarity with Acadian dykeland practice were laid in the decade of the deportation. Settlers used the marshlands in the vicinity of the British forts to supply the garrisons throughout the 1750s. In Chignecto, for example, a Captain Huston ran seventy cattle on the marshes early in the decade; after the expulsion, hay was taken from marshland near Fort Lawrence by both the garrison and individual settlers.<sup>13</sup> Expeditions against isolated Acadian settlements which survived the deportation of 1755 gave those involved an opportunity to observe dykes and *aboiteaux* in current use.<sup>14</sup> Although coarse hay was

10 Otis Little, *The State of Trade in the Northern Colonies Considered with an Account of their Produce and a Particular Description of Nova Scotia* (London, 1748), p. 70.

11 Cited in Clark, *Acadia*, p. 161. See also *ibid.*, pp. 238-42 and Anon., *A Geographical History of Nova Scotia* (London, 1749 and 1755), p. 22.

12 Harris and Warkentin, *Canada Before Confederation*, p. 32.

13 Will R. Bird, *A Century at Chignecto; the key to old Acadia* (Toronto, 1928), pp. 102-4. See also E.C. Wright, "Cumberland Township: a focal point of settlement on the Bay of Fundy", *Canadian Historical Review*, 27 (1946), p. 28; Eaton, "Rhode Island settlers", pp. 25-6.

14 For example, J.C. Webster, "The Journal of Abijah Willard, 1755", *New Brunswick Historical Society Collections*, 13 (1930), pp. 3-19; W.F. Ganong, "Report and map of Major George Scott's expedition to remove the French from the Petitcouidiak, 1758", *ibid.*, pp. 97-114.

taken from the salt-marsh by both Acadian and post-Acadian settlers, any use of the Chignecto marshlands in the years immediately after 1755 would have revealed abandoned Acadian dykes and *aboiteaux*, in more or less good repair, to those in the area. And by 1760, many acres of former Acadian land had been allocated to members of the garrisons, some of whom occupied their grants until well after the influx of New Englanders and provided a link between Acadian and subsequent settlement.<sup>15</sup> Although a “Trimendious Gale of Wind and Surprising [tide]” swept the Bay of Fundy in November 1759, and inundated considerable areas of dyked land, breaches in the dykes were not general, and the New Englanders who came to the Fundy lands in 1760 and 1761 discovered both relict Acadian dykes, and a small group of settlers who were already familiar with marshland agriculture.<sup>16</sup> On their arrival in Nova Scotia, the New Englanders might have noted (as had their agents in 1759) “hay blowing on the wide marshes and around the blackened foundations of the former Acadian homesteads orchard trees in full bloom”.<sup>17</sup>

Under these circumstances, the New Englanders soon put the marshlands to use. Early township records from the Chignecto isthmus indicate that the newcomers took up considerable areas of the marshland. Dyked and undyked areas as well as upland acreages were apportioned among the shareholders of the townships, and the frequent attempts to exchange and consolidate individual marshland holdings suggest that these lands were sought.<sup>18</sup> Certainly, prices given for dyked marsh were consistently higher than those for undyked marsh and approximately the same as those for good upland in the late 1760s.<sup>19</sup> As early as 1763, Gamaliel Smethurst, an educated and observant traveller, regarded the marshes of Chignecto as “the very Egypt of North America”.<sup>20</sup> More sensitive to the labour requirements of different types of farming than to the necessities of subsistence on an isolated frontier, however, he suggested that the few inhabitants might better concentrate on animal husbandry (and keep the

15 Among these was Winkworth Tonge, an engineer with Winslow’s regiment that was engaged in the deportation of 1755, and sometime MLA, who entered the Chignecto area in 1755 and continued to hold land in the isthmus until 1789. John Huston, and Joshua Winslow were members of the first Sackville Township Committee. See also Eaton, “Rhode Island settlers”, pp. 25-6 for a broadly analogous case.

16 Fort Cumberland Orderly Book, 4 November 1759, Boston Public Library, Boston, Massachusetts. Transcript kindly provided by James N. Lawton, Esquire, Curator of Manuscripts, Boston Public Library. See also Brebner, *Neutral Yankees*, p. 35.

17 Ian F. Mackinnon, *Settlements and Churches in Nova Scotia 1749-1776* (Montreal, 1930), p. 24.

18 Records of Meetings in 1760s, Town Records, Sackville, N.B., 1748-1883, MG9 A12-6, Provincial Archives of New Brunswick [hereafter PANB].

19 J.D. Snowdon, “Footprints in the Marsh Mud: Politics and Land Settlement in the Township of Sackville 1760-1800” (unpublished MA thesis, University of New Brunswick, 1975), p. 52.

20 W.F. Ganong, “Gamaliel Smethurst’s narrative on his journey from Nepisiguit to Fort Cumberland, 1761”, *New Brunswick Historical Society Collections*, 6 (1905), p. 388.

marshes “entirely in meadows”) than continue with mixed farming. As the 1765 diary of an anonymous Cumberland County resident reveals, the New Englanders quickly incorporated the marshland into their basically subsistent agricultural economies, although they regarded it (by implication, at least) as “unnatural” ground.<sup>21</sup> By 1766, Lieutenant-Governor Michael Francklin could comment favourably upon the “produce of the fine fertile marshes and other rich lands in the Bay of Fundy”.<sup>22</sup>

Both former Acadian dyked marsh and newly reclaimed land were farmed by the New Englanders during the 1760s, and there is no doubt that Acadian experience with marshland agriculture was invaluable to the progress of dyking during these years. After the British government allowed Acadians to return to Nova Scotia in 1764, a number of them were employed in building and repairing dykes. Indeed, the inhabitants of Kings County stressed their inability to continue their “business in agriculture and improvements in general” without Acadian help in 1765. But their plea, which sought to have the Acadians’ provision allowance continued, surely reflected the settlers’ realization that government assistance enabled the Acadians “to labour at much lower wages”, as much as it did their dependence upon Acadian dyking skills.<sup>23</sup> New Englanders themselves rapidly became proficient in the art of dyking; as early as 1760, settlers in Hants County, on the Basin of Minas, appointed three of their number to “survey and oversee the mending and repairing of dykes”.<sup>24</sup> If anything, it was a problem of labour rather than of insufficient knowledge which beset the sparse, and individualistic, New England population of Nova Scotia as it embarked upon marshland reclamation. Perhaps there was a reflection of this in J.F.W. Desbarres’ recommendation in 1763 for the establishment of a permanent military corps that “might also be of infinite service in raising Dyks, erecting Abbatos &c for the preservation of the enestimable [sic] marsh Lands”.<sup>25</sup> Later in the century, Commissioners of Sewers used general levies, imposed by the General Sessions and payable in “Work wheat or Butter”, to employ labour for marshland reclamation.<sup>26</sup> But by whatever means, consider-

21 Cumberland County, Nova Scotia, Anonymous Diary 1765, on blank sheets of 1765 New England Almanac, MG23 C23, PAC.

22 Lieutenant Governor Michael Francklin to the Rt. Hon. Lords Commissioners for Trade and Plantations, 20 September 1766, quoted in H.A. Innis, ed., *Select Documents in Canadian Economic History, 1497-1783* (Toronto, 1929), p. 215.

23 Memorial of the inhabitants of Kings County to Governor Wilmot, 23 March 1765, in *ibid.*, pp. 194-5.

24 The appointment was made at the third town meeting in Falmouth. See Eaton, “Rhode Island settlers”, pp. 30-2.

25 Proposals for the effectual settlement of the valuable colony of Nova Scotia, 30 July 1763, Nova Scotia Archives Transcripts [NSA], vol. 71, PAC.

26 General Sessions, 21 October 1789, Cumberland County, Record of Sessions 1789-1791, NSA; Nova Scotia Historical Society No. 62 and 63, Public Archives of Nova Scotia [PANS];

able tracts of marshland were newly dyked during the 1760s. Inevitably, there were setbacks. Malachy Salter, a Halifax merchant and member of the Provincial Assembly, observed that the expense of repairing “breaches made from time to time in their dykes by high tides” had left some of the Fundy settlers in difficulty by 1769.<sup>27</sup> Yet the New Englanders undertook the major task of constructing an “aboideau” — the use of this term reveals the essential continuity of dyking practice — across a navigable stream in the Chignecto Isthmus in 1770.<sup>28</sup>

When Charles Dixon arrived in Chignecto with the first Yorkshire settlers in 1772, he concluded that “things at first glance wore a gloomy aspect”. In his view, “Indolence, and want of Knowledg [sic]” were the prime causes of the “Disorder that so much abounded”.<sup>29</sup> John Robinson and Thomas Rispin, two Yorkshire farmers who travelled through Nova Scotia in 1774, were equally critical of the “ignorant, indolent” New Englanders, their indifferent stock, and their poor farm management.<sup>30</sup> But the Englishmen’s critique reflected their evaluation of Nova Scotian farm practice in European terms. Accustomed to intensive farming and insensitive to the implications of cheap land, expensive labour, and poor market connection for farm management, they were appalled by the seeming lack of “judgement” and “industry” among the Nova Scotian settlers, who milked their cows but once a day, continued “in bed until seven or eight o’clock in the morning”, and, purportedly, took a glass of rum before breakfast.<sup>31</sup>

The realities of the New Englanders’ achievements are more clearly revealed by less subjective evidence. After inspecting the country around Sackville, Charles Dixon purchased 2500 acres from New Englander Daniel Hawkins.<sup>32</sup> His property included 2000 acres of “Land in the Willderness”, 180 acres of wooded upland, 55 acres of cleared upland, 21 acres of undyked marsh, and over 200 acres of marsh “all Dykt and Drained”. Two houses, barns, cow-byres, over 60 horned cattle, 7 horses, 36 sheep, hogs and goats made up the farm which

Westmorland, Record of Sessions, N.B. Local Records, Westmorland County, MG9 A12 (11), vol. 3, PAC; Minutes of Meetings 1780-1787, Town of Cumberland, Cumberland County Microfilm M-843, PANS.

27 Letter from Malachy Salter, 18 April 1769, cited in Rev. George Patterson, “Pioneers of Presbyterianism in the Maritime Provinces of Canada”, Tps. Family Papers, Patterson, PANS.

28 Miscellaneous Papers, F1 and F2, New Brunswick Museum [hereafter NBM].

29 Testament of Charles Dixon, 1773, Genealogical materials, Dixon Family Papers, MDX, PANB.

30 John Robinson and Thomas Rispin, *A Journey Through Nova Scotia* (York, England, 1774), pp. 22-4, 32.

31 *Ibid.*, p. 36.

32 “Land Bot [by] Charles Dixon of Daniel Hawkins in Sackville, 1772”, General Accounts 1774-1878, Dixon Family Papers, MDX/17, PANB.

Dixon acquired. Thomas Bowser, another of the Yorkshire settlers, leased a 500 acre farm with 45 acres of dyked marsh and twenty acres of cleared upland on his arrival in Nova Scotia. Beyond Chignecto, equally extensive areas of dyked marshland were under cultivation in the early 1770s. At Windsor, good wheat, barley, oats, and peas grew on the large marsh called “the King’s meadow”; 2,600 acres of marsh at Grand Pré bore fine wheat; and at Cornwallis grains and grass covered the dyked land. Only at Annapolis Royal and nearby Granville, settled by poor soldiers who were “entire strangers to cultivation and . . . very bad farmers”, were Robinson and Rispin critical of the settlers’ dyke-building accomplishments. Here, former Acadian marshland lay in disrepair behind breached dykes; in contrast, almost all the properties in Amherst, Tantramar, and Cornwallis which the Yorkshire travellers found for sale included tracts of dyked marshlands.<sup>33</sup>

Marshland reclamation continued during the 1770s. In 1774, the inhabitants of Cornwallis were “diking over another river”; Thomas Robinson of Amherst township had reclaimed a hundred acres of marshland since coming to the area a few years before; and other residents of Amherst were “proceeding with great spirit” to increase the dyked acreage.<sup>34</sup> In Chignecto, the Yorkshire settlers were instrumental in instigating and implementing dyking and draining improvements. William Cornforth offers a case in point. Soon after his arrival in Nova Scotia in 1774 he rented a farm containing dyked land; four years later, when he was one of the Commissioners of Sewers for Westmorland, another part of the marsh “was taken in or repaired”, with Cornforth doing the labour “to the amount of 12 pounds or their [sic] about”; in 1779, the proprietors of Bear Island marsh in Sackville agreed to dyke their land under Cornforth’s direction; and by 1786, Sackville township records listed “60 acres of marsh diked by Wm. Cornforth”.<sup>35</sup> Many of the Yorkshire settlers came from the Vales of York and Pickering, where damp, often water-logged “carr” or fen-land was made productive by ditching, draining, and the construction of “flood-gates”, and it is quite possible that they applied their familiarity with wet-land reclamation in England to the problems of their new lands in Nova Scotia.<sup>36</sup> English experience may have inspired, for example, William Wells’

33 Robinson and Rispin, *A Journey Through Nova Scotia*, pp. 9-11, 13, 21, 42, 47-8.

34 *Ibid.*, pp. 11, 18.

35 Westmorland County Petitions (Duplicates), 3 August 1808, Cb., NBM; Judgement by A. Botsford, 1793, Dixon Family Papers, MDX/5, PANB; Town Records, Sackville, New Brunswick, 1748-1883, *op. cit.*

36 Data on origins are not complete but see Trueman Papers, Mount Allison University Archives, and the Harrison Family Papers, PANS. For conditions in Yorkshire see (Mr.) Marshall, *The rural economy of Yorkshire: comprising the management of Landed Estates and the present practice of husbandry in the agricultural districts of the county* (London, 1788), esp. I, p. 225; Alan Harris, *The Rural Landscape of the East Riding of Yorkshire, 1700-1750* (London, 1961),



plans to drain 50 acres — “at present all a lake or covered with water” — on the Sackville-Westmorland boundary in 1788.<sup>37</sup> Yet if this were the case, the Yorkshiremen’s skills served only to complement the proficiency of earlier settlers in the basic techniques of dyke and *aboiteaux* construction developed by their Acadian predecessors. Dyke building was common between 1760 and 1772, and by 1783 the inhabitants of Cumberland County already had in prospect the construction of an “aboitdeau” across the 64-yard wide Missequash River, an achievement which would have eclipsed, in magnitude, any Acadian dyke building.<sup>38</sup>

Before 1783, the former Acadian lands of the Bay of Fundy developed in comparative isolation. A single, poor, road from Port Royal and Windsor linked the marshlands of Annapolis and Minas with Halifax.<sup>39</sup> Chignecto’s overland connection with the capital was by bridle-path and blazed-trail. Stock may have been driven across the province occasionally, but for most purposes Halifax, the only appreciable market for produce in the colony, was inaccessible to the Fundy settlers. A sporadic, water-borne trade offered shoes, scythes, “rum, rice, sugar, molasses and other spices” at high cost from Boston, but provided only a meagre and unreliable outlet for agricultural produce from the region.<sup>40</sup> Market conditions improved in the late 1770s, when British troops in Boston, and later Halifax, raised the demand for all types of fresh produce, and clandestine trade with the American colonists flourished.<sup>41</sup> But for twenty eight years after the Acadian expulsion, a high degree of self-sufficiency marked the marshland settlements. Families produced their own maple sugar, tallow, and soap, as well as their own woollen and linen cloth; mixed farming, which provided a variety of grains, meat, milk and garden produce, prevailed.<sup>42</sup> Dyked marshland was used by the still small population, but when labour was scarce, and without a reliable market for agricultural products (such as the larger Acadian population had found in Louisbourg)<sup>43</sup>, there was no incentive to

esp. pp. 81-3; John Palmer, “Landforms, drainage, and settlement in the Vale of York”, in S.R. Eyre and G.R.J. Jones, eds., *Geography as Human Ecology* (London, 1966), p. 91.

37 Memorial of William Wells, 29 July 1788, Westmorland County Petitions, (Duplicates), Cb, NBM.

38 Minutes of Meeting, 7 April 1783, Town of Cumberland, Cumberland County Microfilm M-843, PANS.

39 M.W. Armstrong, “Neutrality and Religion in Revolutionary Nova Scotia”, *The New England Quarterly*, 9 (1946), p. 50.

40 Robinson and Rispin, *A Journey Through Nova Scotia*, p. 15.

41 K. Relief Williams, “Social conditions in Nova Scotia 1749-1783” (unpublished MA thesis, McGill University, 1936), pp. 119-21.

42 Robinson and Rispin, *A Journey Through Nova Scotia*, pp. 24-6; Martell, “Pre-Loyalist settlements”, p. 205.

43 In 1740, for example, 250 head of livestock and other foodstuffs, skins, and hides to the value of almost 26,000 livres reached Cape Breton from mainland Acadia. Vessels from Minas and

expand production much beyond local requirements, to specialize in the cultivation of particular crops, or to intensify use of the land.

Economic conditions in the Fundy settlements changed markedly with the Loyalist influx to Nova Scotia in 1783. Some 30,000 newcomers had to be accommodated in the province; large urban markets emerged in Halifax and Saint John; even those settlers who occupied the St. John valley and other rural districts had to be supplied with provisions during their first few years on the land. Imports from the south met much of the demand, but after 1783 marshland farmers had far more ready markets for their surplus produce. Overland communications within the region improved; the Bay of Fundy became a busy commercial waterway. Cheap, fine flour and other grains from the American states offered stiff competition to coarser Nova Scotian products, however, and marshland farmers soon concentrated upon livestock for market production.<sup>44</sup> By 1789, cattle were being driven from Chignecto to Saint John, and considerable quantities of stock, butter, and cheese were sent to both Halifax and the Fundy port in the last decade of the century.<sup>45</sup> In 1800, the farmers of Chignecto and Minas continued to produce most of their own requirements; a variety of grains and garden crops were grown on marsh and upland.<sup>46</sup> But as livestock offered commercial returns, so their relative importance increased, and larger areas of both dyked and undyked marshland were turned to pasture and hay. Economic connection prompted product specialization, and as the dyked marshland was extended, and the availability of American breadstuffs increased, the former Acadian lands took on their characteristic nineteenth-century aspect, being principally under grass and marked in the fall by "vast stacks of hay made up in the true English manner".<sup>47</sup> Here, in the wider context of economic circumstances, rather than in the difficulties of marshland reclamation, lie many of the reasons for the adverse comparison of Acadian and "English" land-use patterns on the Bay of Fundy marshlands in the late eighteenth century.

Chignecto cleared for Canso earlier in the century with cattle, beef, and pork as well as boards. For a brief summary see Andrew H. Clark, "New England's Role in the Underdevelopment of Cape Breton Island during the French Regime, 1713-1758", *Canadian Geographer*, 9 (1965), pp. 1-12.

44 John Homer, *A Brief Sketch of the present state of Nova Scotia* (Halifax, 1834) offers a shrewd appraisal of the effect of American competition on Nova Scotian agriculture.

45 Letter of George Leonard, 14 October 1789, Hazen Papers, Correspondence, 1787-1793, NBM; Diary of William Trueman, 1802-1809, Trueman Papers, Mount Allison University Archives.

46 Titus Smith, "Survey of the Eastern and Northern Parts of the province of Nova Scotia in the years 1801 and 1802", 16 September 1801, Mss. vol. 380, PANS; Diary of William Trueman, *op. cit.*

47 Description of Nova Scotia, 1823, MG21, Add. Mss. 19071, PAC; Copy of the Report of Lt.-Col. Cockburn on the subject of Emigration laid before the Colonial Department, Downing Street, March 1828, Appendix A, No. 1, p. 20, Ganong Collection, NBM.