# **American Geographical Society**

Did New England Go Downhill? Author(s): Michael M. Bell

Source: Geographical Review, Vol. 79, No. 4 (Oct., 1989), pp. 450-466

Published by: American Geographical Society Stable URL: http://www.jstor.org/stable/215118

Accessed: 25/02/2009 23:18

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <a href="http://www.jstor.org/page/info/about/policies/terms.jsp">http://www.jstor.org/page/info/about/policies/terms.jsp</a>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=ags.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.



American Geographical Society is collaborating with JSTOR to digitize, preserve and extend access to Geographical Review.

## DID NEW ENGLAND GO DOWNHILL?\*

#### MICHAEL M. BELL

ABSTRACT. Evidence from landscape history and agricultural censuses does not support the thesis of a regionwide nineteenth-century decline in farming for New England. On the basis of output per farm acre, New England has been one of the most productive agricultural regions in the United States. Urban and industrial growth and associated changes in rural culture are more important than comparative advantage in explaining the actual post-1900 decline in agriculture.

THE decline of New England agriculture remains one of the best-known, generally accepted themes in American historical geography. Told and retold, the tale has become part of the region's identity, especially since the 1927 publication of the article A Town That Has Gone Downhill by James Walter Goldthwait.¹ Most New Englanders know something of how farmers abandoned the rocky, infertile, hilly fields at the first opportunity and migrated to the flat, rock-free, fertile soils of the Midwest, which became the American breadbasket and heartland. The grid of stone walls running through the forests of New England and the current lack of much agriculture there reinforce this interpretation and give it the stature of common sense.

The traditional interpretation of New England agriculture was best summarized in a widely cited couplet attributed to the father of Ezra Stiles, an eighteenth-century president of Yale College: "Nature out of her boundless store / Threw rocks together, and did no more." A popular history published slightly more than a decade ago described nineteenth-century New Englanders as leading a "monotonous, bare, subsistence life" of "marginal, self-sufficient farming." Similar interpretations are found in academic works. Yet the true picture was not so simplistic. Based on analysis of agricultural-census data, nineteenth-century landscape views, and contemporary agricultural commentaries, the thesis advanced in this article is that the long-term geographical pattern for the region has been misrepresented. The conventional interpretation has portrayed the celebrated decline as the inevitable response of a slim resource base to midwestern competition and has distorted the timing, size, and significance of the decline.

<sup>\*</sup> I thank David Lowenthal, Diane Mayerfeld, Joseph Miller, and John Western for reading drafts of this article.

<sup>&</sup>lt;sup>1</sup> James Walter Goldthwait, A Town That Has Gone Downhill, Geographical Review 17 (1927): 527–552.

<sup>&</sup>lt;sup>2</sup> Cited in Chard Powers Smith, The Housatonic: Puritan River (New York: Rinehart, 1946), 235.

<sup>&</sup>lt;sup>3</sup> William F. Robinson, Abandoned New England (Boston: New York Graphic Society, 1976), 42, 44.

<sup>&</sup>lt;sup>4</sup> Ladd Haystead and Gilbert C. Fite, The Agricultural Regions of the United States (Norman: University of Oklahoma Press, 1955), 29.

<sup>•</sup> MR. Bell is a doctoral candidate jointly in sociology and the School of Forestry and Environmental Studies at Yale University, New Haven, Connecticut 06511.

### THE TRADITIONAL MODEL

Between 1927 and 1950, Goldthwait, Harold F. Wilson, John D. Black, and the contributors to the New England Studies Program of the American Geographical Society worked out what could be called the traditional model of the New England agricultural decline.<sup>5</sup> The AGS-sponsored program sought to understand "the highly critical state" of New England agriculture with "particular attention ... to problems that spring from the relations of man to the natural elements of topography, rock structure, soil, and climate."6 In later refinements of the model, its basic components remained unchanged.<sup>7</sup> The model emphasized the stoniness and the infertility of New England soils and the hardscrabble, subsistence characteristics of its farm economy. It argued that subsistence farming on stony soils led to the early construction of stone walls to clear the land for cropping, the rapid agricultural decline in the region, and finally widespread farm abandonment in preference for midwestern prairie lands. Numerous writers also showed a predilection for social-Darwinist and environmental-determinist explanations of the forging of the Yankee character amid the hard New England hills and the subsequent impoverishment of the rural stock as decline ensued.8

Several originators of this model had connections with Harvard University, and much of the popularity of the model must be attributed to a series of dioramas known as the Harvard Forest models, put together between 1931 and 1941. The dioramas portray step by step the clearing, field abandonment, and subsequent regrowth of the Harvard Forest land at Petersham, Massachusetts. Stone walls dominate the views, with virtually no wood fencing; the walls arise from the initial act of clearing the land and do not change as the dioramas proceed through time (Figs. 1–3). The implication is that the walls originated from a land so stony that it had to be cleared of rocks before farming could begin. That image fits well with the traditional interpretation of New England as a region extremely poor in natural soil resources. Decent productivity on these rocky, "essentially infertile soils" was deemed possible only by "heavy fertilization."

<sup>&</sup>lt;sup>5</sup> New England's Prospect 1933 (edited by John K. Wright; New York: American Geographical Society, 1933); John D. Black, The Rural Economy of New England (Cambridge, Mass.: Harvard University Press, 1950); Harold Fisher Wilson, The Hill Country of Northern New England (New York: Columbia University Press, 1936); Goldthwait, footnote 1 above.

<sup>&</sup>lt;sup>6</sup> Annual Report of the Council, Geographical Review 18 (1928): 318; John K. Wright, New England, Geographical Review 19 (1929): 479-494, reference to 485.

<sup>&</sup>lt;sup>7</sup> Clarence Danhoff, Change in Agriculture (Cambridge, Mass.: Harvard University Press, 1969); Robert Eisenmenger, The Dynamics of Growth in New England's Economy, 1870–1964 (Middletown, Conn.: Wesleyan University Press, 1967); Hugh Raup, The View from John Sanderson's Farm: A Perspective for the Use of the Land, Forest History 10 (1967): 1–11; Howard S. Russell, A Long Deep Furrow: Three Centuries of Farming in New England (Hanover, N.H.: University Press of New England, 1976).

<sup>&</sup>lt;sup>8</sup> Black, footnote 5 above, 23; Danhoff, footnote 7 above, 114; Wilson, footnote 5 above, 149–152.

<sup>9</sup> Raup, footnote 7 above, 6.

Advocates of the traditional interpretation usually described New England agriculture as declining rapidly subsequent to the opening of the Erie Canal in 1825 and of the railroads shortly thereafter, which allowed production from the better agricultural lands of the Midwest to compete locally. Depending on the area under study, the research placed the peak of New England agriculture at anywhere from 1830 to 1850. Although these authors were aware that the dates applied only to specific sites in New England, they were read to be and were intended to be representative. However, one supporter did rather grudgingly note the continued vitality of New England agriculture through 1880 at least.

Before the ascendancy of what is now the traditional, accepted model of decline, there was a lively debate concerning the agricultural capabilities and future of New England. Against the interpretations that later became almost totally dominant, supporters of New England agriculture pointed to high yields and good prices that farmers received and argued that farms were productive, competitive, and financially viable.<sup>13</sup> As one supporter stated early in the twentieth century, "We have been obsessed with the stale idea that New England was a sucked orange, with respect to its human enterprise and its opportunity." In the remainder of this article I present evidence to revive this counterargument.

## STONE WALLS AND STONY SOILS

To anyone familiar with the large areas of bare rock, thin soil, and stony till in New England, an argument for high farm productivity may not seem

<sup>&</sup>lt;sup>10</sup> Louis A. Wolfanger, Economic Geography of the Gray-Brownerths of the Eastern United States, *Geographical Review* 21 (1931): 276–296; Harvard Forest Models, Fisher Museum of Forestry, Harvard Printing Office, Cambridge, Mass., 1975; Raup, footnote 7 above, 6; Goldthwait, footnote 1 above; Wilson, footnote 5 above.

<sup>&</sup>lt;sup>11</sup> Harold Fisher Wilson, Population Trends in Northwestern New England, 1790–1930, Geographical Review 24 (1934): 272–277, reference to 272.

<sup>12</sup> Black, footnote 5 above, 142-144.

<sup>&</sup>lt;sup>13</sup> A. L. Loveland, Life on New England Farms, *Cultivator* 37 (1872): 99–100; Frederic Hathaway Chase, Is Agriculture Declining in New England?, *New England Magazine* NS 2 (1890): 448–453; New England: What It Is and What It Is to Be (edited by George French; Boston: Chamber of Commerce, 1911)

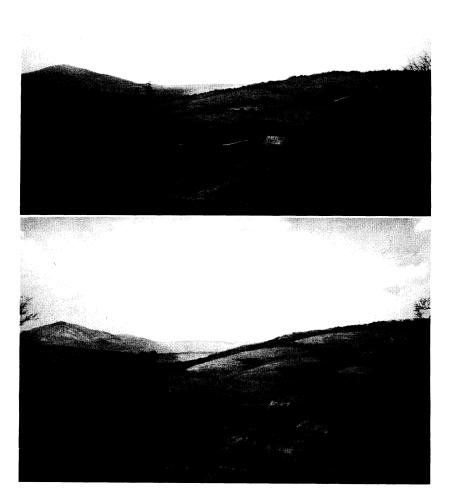
<sup>&</sup>lt;sup>14</sup> George French, New England, in New England: What It Is, footnote 13 above, 1–31, reference to 31.

FIG. 1—Second Harvard Forest model, labeled An Early Settler Clears a Homestead—1740. Note the stone walls being constructed as part of initial clearing. (Courtesy of Fisher Museum, Harvard Forest, Petersham, Massachusetts)

FIG. 2—Third Harvard Forest model, labeled Height of Cultivation for Farm Crops—1830. Stone fences predominate; only one short section of wood fence is present. The fencing shown in the second model remains unchanged in this one. (Courtesy of Fisher Museum, Harvard Forest, Petersham, Massachusetts)

FIG. 3—Fourth Harvard Forest model, labeled Farm Abandonment—1850. Agricultural decline as portrayed here is well advanced. (Courtesy of Fisher Museum, Harvard Forest, Petersham, Massachusetts)





tenable. Yet the key to understanding New England agricultural history is recognizing the extreme variability of the land. This wide variability is quite evident in contemporary landscape views. The New England scenes of nineteenth-century painters George Henry Durrie, Fitz Hugh Lane, Worthington Whittredge, Albert Bierstadt, George Inness, Winslow Homer, and others show a broad range of fenced landscapes, from ones of exclusively stone construction to ones made only of wood and many with a mixture of both. On the whole, the artworks depict more wooden than stone fencing. <sup>15</sup> One of the best series of views of the period is found in "Connecticut Historical Collections" by John Warner Barber, which is liberally illustrated with engravings of scenery "executed from drawings taken on the spot" (Figs. 4-6).16 In the seventy-nine views that show agricultural landscapes, wood fencing overwhelmingly dominates; only ten views show the landscape of stone walls suggested by the Harvard Forest models. Additionally there is considerable regional variation of fence type. Barber's views of the Connecticut portion of the New England central valley, with its soft brownstone foundation and overlying glacial lake sediments, show a four-to-one ratio of wood to stone fences. In the metamorphic western and eastern uplands, wood dominates by a two-to-one margin. And for the coastal slope, with its high proportion of granitic bedrock and rocky recessional moraines, the lithographs depict twice as many stone fences as wood ones.

The portrayal by these contemporary landscape artists suggests that the rocky images of the Harvard Forest models do not apply to all of nineteenth-century New England. Also the traditional interpretation often assumes that most stone walls were erected to clear fields for farming, whereas early fences were instead likely made of wood from trees felled during clearing. Stone walls appeared over time and were built mostly wall by wall as the supply of labor and of stones worked up by frost and erosion permitted. An 1867 guide for beginning farmers observed that "jobbers, who itinerate through the country in search of labor," built the stone walls. In contrast with the

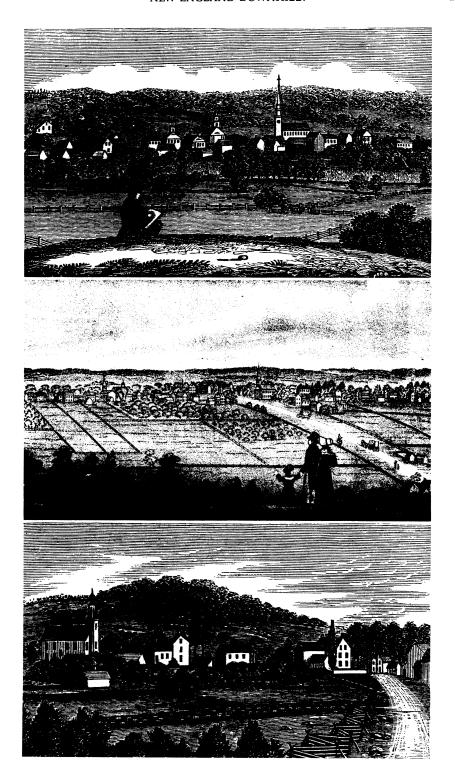
<sup>&</sup>lt;sup>15</sup>Arcadian Vales: Views of the Connecticut River Valley, Wesleyan University, Center for the Arts, Middletown, Conn., 1982; S. Lane Faison Jr., The New England Eye, Williams College Museum of Art, Williamstown, Mass., 1983; Nina Fletcher Little, Paintings by New England Provincial Artists, Museum of Fine Arts, Boston, 1976; Martha Young Hutson, George Henry Durrie (Laguna Beach, Cal.: American Art Review Press, 1977); Portraits of New England Places, Colby College Art Museum, Waterville, Maine, 1984; Robert G. Workman, The Eden of America: Rhode Island Landscapes, 1820–1920, Rhode Island School of Design, Museum of Art, Providence, 1986.

<sup>&</sup>lt;sup>16</sup> John Warner Barber, Connecticut Historical Collections (New Haven: Durrie, Peck, and Barber, 1857–58 [originally published 1838]), iv.

FIG. 4—Farmington, Conn. (1838). This view shows the dominance of wood fencing characteristic of the central valley in the nineteenth century. *Source:* Barber, text footnote 16.

FIG. 5—Litchfield, Conn. (1838). Even in an upland hill town, stone walls were not conspicuous. *Source:* Barber, text footnote 16.

Fig. 6—Colebrook, Conn. (1838). In this view Barber showed the mixture of stone and wood fencing typical of many upland areas. *Source:* Barber, text footnote 16.



Whiggish interpretation of the backbreaking work required for stone fencing, this source emphasized the labor-saving advantages of a well-made stone fence, with its relative lack of maintenance compared with other fence types. <sup>17</sup> Indeed, one eighteenth-century farmer at Hadley, Massachusetts, having no stone on his own land on the rock-free glacial lake sediments in the central valley, imported rock from many miles away to build a half-mile-long wall, the envy of his neighbors. <sup>18</sup>

The vivid image of a stone wall running through steep woodland, with soil so thin as to barely cover the bedrock, can distort the picture of New England agriculture as a whole. A common response to this sight is to wonder how such ground could ever have been plowed; the answer is that, like most New England farmland, it probably never was used for intensive cropping. In the late nineteenth century, only 33 percent of New England farmland was classified as tilled or tillable by the agricultural census. The rest was equally divided between pasture and woodland, with the latter category likely containing much land that once had been pasture. 19 In other words, at least half the land ever cleared in New England was pasturage, not cropland, especially on high and rocky ground. That is no surprise, because sheep raising was one of the principal activities of nineteenth-century New England farmers. There were so many sheep in Vermont that the governor remarked in 1842 that wool was the staple of the state.20 Rather than being built to deal with stones uncovered in clearing and tilling of adjacent ground, most stone walls on rocky upland slopes were low-maintenance stock-management fences.

## MYTH OF LOW FARM PRODUCTIVITY

The best comparative information on the status of New England in countrywide farm productivity comes from the decennial agricultural censuses. Unfortunately the early ones were notoriously eccentric. There was a wide margin of error in the numbers generated by census takers, limited as they were by inadequate roads and by respondents whose knowledge of their farming operations was often numerically imprecise. Furthermore, changes of definitions and budgets often affected the comparability of data from one census to the next. Consequently the census data that follow should be seen only as a broad indicator of conditions.

On the 33 percent of New England agricultural land either cropped or in rotation, productivity was remarkably high compared with that of the rest of the United States. In 1879, the first crop year for which per-acre yield

<sup>&</sup>lt;sup>17</sup> S. Edwards Todd, The Young Farmer's Manual (New York: F. W. Woodward, 1867), 145.

<sup>&</sup>lt;sup>18</sup> Russell, footnote 7 above, 189.

<sup>19</sup> Black, footnote 5 above, 149.

<sup>&</sup>lt;sup>20</sup> Harold Fisher Wilson, The Roads of Windsor, *Geographical Review* 21 (1931): 377-397, reference to 384.

REGION	CORN	OATS	WHEAT	BARLEY	BUCKWHEAT
Connecticut	33.7	27.5	17.6	21.4	12.3
Maine	31.0	28.8	15.9	21.8	19.0
Massachusetts	34.2	31.0	15.2	25.3	11.9
New Hampshire	36.8	34.5	16.4	22.5	20.7
Rhode Island	31.4	28.6	15.1	24.9	11.9
Vermont	36.5	37.6	16.3	25.4	20.2
New England	34.5	32.6	15.5	23.6	17.5
United States	28.1	25.3	13.0	22.0	13.9

Table I—Per-Acre Yield of Cereals in New England 1879<sup>a</sup>

Source: Report, text footnote 21.

information is available for the entire country, New England exceeded the national average for corn by 19 percent, for oats by 22 percent, for wheat by 16 percent, for barley by 7 percent, and for buckwheat by 21 percent. Yields by individual state and crop were often one-quarter to one-third above the average (Table I).<sup>21</sup> The potato was the most successful crop in the region: Maine led the country in per-acre yield, New Hampshire was third, and Massachusetts was fifth.<sup>22</sup> High yields of vegetables supported a large export and canning industry, including the largest corn-canning factory in the country at Windsor, Vermont, in 1896.<sup>23</sup> Vegetable farming in the Boston basin was so successful that produce was shipped widely, even dominating the winter market in late-nineteenth-century Florida, according to one report.<sup>24</sup>

Of course, productivity does not necessarily correspond to farm income. Such figures are hard to reconstruct, but comparative information is available on the value of farm products for sale and home consumption. In 1879, the total values of farm products per acre of farmland in Connecticut, Massachusetts, and Rhode Island were third, fourth, and fifth highest in the United States. The northern New England states yielded significantly lower values, but the region as a whole still was above the national average. By 1889, a period in which the national average fell to \$3.95 per farm acre in response to the worldwide agricultural crisis of that decade, yields in New England rose to \$5.39 per farm acre (Table II). The three southern New England states then ranked second, third, and fourth in the United States, after New Jersey but well ahead of Illinois, Ohio, Iowa, Indiana, California, and Florida.<sup>25</sup>

Although the quality of the early censuses is uneven, there is no reason to suspect that they consistently exaggerated New England productivity in comparison with that of other regions. In 1982, the most recent fully published census, the situation remained much as it was a century ago. Con-

<sup>&</sup>lt;sup>a</sup> In bushels.

<sup>&</sup>lt;sup>21</sup> Report on the Productions of Agriculture: Tenth Census (Washington, D.C.: Department of the Interior, 1883), 40.

<sup>&</sup>lt;sup>22</sup> Russell, footnote 7 above, 448.

<sup>23</sup> Wilson, footnote 20 above.

<sup>&</sup>lt;sup>24</sup> Russell, footnote 7 above, 452.

 $<sup>^{25}</sup>$  Twelfth Census of the United States: Agriculture, Part I (Washington, D.C.: Government Printing Office, 1902), tables 52 and 58.

	188	9	1982	
REGION	Value (\$)	Rank	Value (\$)	Rank
Connecticut	7.96	2	642.27	1
Maine	3.57	24	271.95	14
Massachusetts	9.36	3	459.25	5
New Hampshire	3.94	20	218.31	22
Rhode Island	8.99	4	486.28	3
Vermont	4.63	16	234.62	19
New England	5.39	na	319.80	na
United States	3.95	na	133.66	na

TABLE II—VALUE (\$) OF PRODUCTS PER FARM ACRE 1889 AND 1982

Sources: Twelfth Census, text footnote 25; 1982 Census, text footnote 26. na = not applicable.

necticut led the country in market value of agricultural products sold per acre of farmland, with Rhode Island, Massachusetts, Maine, Vermont, and New Hampshire ranking third, fifth, fourteenth, nineteenth, and twenty-second. As a whole the region averaged \$319.80 per farm acre, compared with a national average of \$133.66.<sup>26</sup>

Recent information on crop yields also shows much the same pattern as in the late nineteenth century. Three-year averages for corn silage between 1981 and 1983 in New England were more than 30 percent above the national figure—higher than in Kansas, Ohio, Illinois, Indiana, Iowa, Wisconsin, and other states in the traditional corn belt. Although wheat is grown only in very small amounts in New England today, yields in three of the four states where it was produced exceeded the national average, in Maine by more than 30 percent. Maine was also the only New England state where oats was a significant crop; in 1982 its yield ranked fourth among the principal oatgrowing states. Hay yields were below average in New England, but milk production per unit of feed was the highest in the United States, and milk production per cow was also well above the national average.<sup>27</sup>

Inspection of the data for the 1879 and 1889 crop years contained in the 1880 and 1890 censuses does not bear out the interpretation that New Englanders remained in farming only by applying massive amounts of fertilizer. Rates of expenditure for commercial fertilizers were quite high in the southern New England states. Even so, per acre of improved farmland, New England as a whole had a lower fertilizer expenditure in 1879 than any individual state on the east coast except Florida, and a lower expenditure in 1889 than any east-coast state. A century later, despite the high rates of fertilizer application in three southern New England states, the region as a whole continued to exceed the national average only slightly in the generally

<sup>&</sup>lt;sup>26</sup> 1982 Census of Agriculture: Vol. I, Part 51, United States Summary and State Data (Washington, D.C.: Government Printing Office, 1984), table D.

<sup>&</sup>lt;sup>27</sup> Agricultural Statistics 1984 (Washington, D.C.: Government Printing Office, 1984), tables 43, 364, 465, 474, 475; 1982 Census, footnote 26 above, table 24.

<sup>&</sup>lt;sup>28</sup> Russell, footnote 7 above, 460; Raup, footnote 7 above, 6.

<sup>&</sup>lt;sup>29</sup>Twelfth Census, footnote 25 above, table 58.

comparable category of tons of commercial fertilizer applied per acre of harvested cropland, at 0.19 tons versus 0.15 tons for the entire country. After Pennsylvania and New York, this tally was the lowest figure on the east coast. Significantly, in 1879 the midwestern and western states of Indiana, Ohio, California, Illinois, and Arizona had rates of fertilizer expenditure an order of magnitude lower than those in the older farming regions of the United States. Currently usage in all of these states is as high as or higher than in New England.<sup>30</sup>

### TIMING OF THE DECLINE

The traditional model dates the inception of agricultural decline in New England from 1830 to 1850, on the bases of falling population figures, local land records in exceptionally hilly and rocky communities like Lyme, New Hampshire, and Petersham, Massachusetts, and early accounts of abandonment. A report from 1840 is typical of these accounts.

There are several towns on the eastern declivity of the Green Mountains of Vermont, and there are other hill towns in Massachusetts and New Hampshire, in that state of deterioration which shows that a portion of the settlers had left the ground, and the larger proportion of those who are left look with discouragement on the exhausted lands surrounding their dilapidated houses and barns.<sup>31</sup>

But other accounts, like this one from 1872, testified to high yields on newly opened land.

A very large portion of the lands upon which such heavy yields of potatoes are grown in the north part of New-Hampshire are *new lands*, recently cleared of their forest growth, and such lands contain not only an abundance of available potash, but also phosphoric acid and all other mineral constituents required in growing from 250 to 400 bushels of potatoes per acre for several years in succession.<sup>32</sup>

Recent historical case studies have questioned the implications of the population data used by supporters of the traditional thesis of agricultural decline. The number of farms, the amount of land in farms, and rural economy and society remained stable in Chelsea, Vermont, through the closing decades of the nineteenth century, despite loss of population.<sup>33</sup> In New Hampshire, farm income underwent little change after the Civil War, as the agricultural economy of the state adjusted successfully to changing conditions.<sup>34</sup> Though often citing its figures, advocates of the traditional interpre-

<sup>30</sup> Agricultural Statistics, footnote 27 above, table 594.

<sup>&</sup>lt;sup>31</sup> Issac Hill, Address Delivered before the Lyceum at Candia, New Hampshire, Farmer's Monthly Visitor 2 (1840): 34.

<sup>32</sup> Levi Bartlett, Potatoes in New-Hampshire, Cultivator 37 (1872): 627.

 <sup>&</sup>lt;sup>33</sup> Hal S. Barron, Those Who Stayed Behind (Cambridge, U.K.: Cambridge University Press, 1984).
<sup>34</sup> Paul Glenn Munyon, A Reassessment of New England Agriculture in the Last Thirty Years of the Nineteenth Century (New York: Arno Press, 1978).

tation made little comprehensive use of the agricultural census, with one exception.<sup>35</sup> Even taking into account their questionable quality, the data do not fit the early-decline model, as shall become evident.

If the decline is measured by total land in agriculture, the census showed no important downturn for New England until after 1900 (Fig. 7). The peak appeared in 1880, when 50.4 percent of the land was in farms after thirty years of generally increasing percentages; 1900 showed a similar figure of 48.2 percent. The peaks generally came earlier in the three southern states than in the northern ones: Rhode Island had a gradual decline from 1850 onward, the first year for which the census recorded landuse, and the peaks for Connecticut and Massachusetts occurred in 1860. But the amount of farmland in the latter two states declined less than 5 percent between 1860 and 1900. The figures were virtually identical in New Hampshire in 1860 and 1880, at 65 percent and 64.7 percent; in 1900 it still was at 62.7 percent. Vermont peaked solidly in 1880 at 82.3 percent but still showed the statistically indistinguishable figures of 79.6 percent for 1900 and 78.6 percent for 1910. The highest figure for Maine came in 1900 at 31.8 percent, which was equaled statistically at 31.7 percent in 1910. The 1910 figure for New England as a whole, 46.2 percent, was also likely well within the margin of census error so that statistically it is indistinguishable from 48.2 percent in 1900, although the two figures together may indicate the beginning of a slight decline after 1880. Still, a major nineteenth-century downturn is not evident from these data.

Land in farms is essentially a property measure and may miss important changes in landuse. Between 1850 and 1920, the census categorized farmland as improved, consisting of land in crops, fallow, pasture, vineyards, and orchards, or as unimproved, which included woodland and other rough land and old fields not in pasture or cultivation.<sup>36</sup> From 1850 to 1880, the percentage of total farmland that was improved was remarkably constant, varying less than a half percent from 61 percent. But between 1880 and 1890, the ratio fell to 54 percent, in part because of a change in the definition of unimproved land to include pastures and meadows that had never been plowed (Fig. 8). The drop was real, though perhaps less abrupt than the numbers indicated.<sup>37</sup> The numbers continued to fall to 40 percent in 1900 and finally to 37 percent in 1910. The 1920 census yielded a figure of 36 percent, evidence that the falling trend had leveled.

These figures on changing landuse do not override the land-in-farms measure. Instead they indicate an adjustment to new marketing conditions in a stabilizing farm economy, as in Chelsea, Vermont. The change represents the sharp decline in wool prices after the Civil War, especially after 1890, which led to the abandonment of many high rocky pastures as sheep herding

<sup>35</sup> Black, footnote 5 above.

<sup>&</sup>lt;sup>36</sup> Report, footnote 21 above, 3.

<sup>37</sup> Black, footnote 5 above, 145.

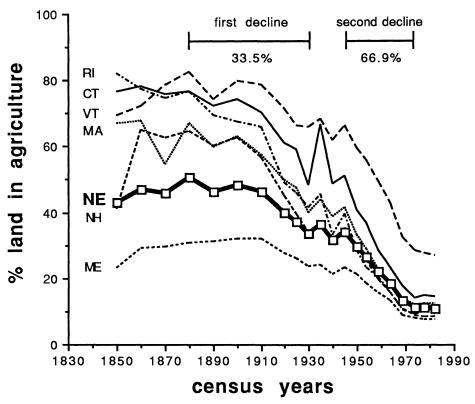


FIG. 7—Percentage of land in agriculture in New England 1850–1982. Sources: Historical Statistics of the United States: Part I (Washington, D.C.: Government Printing Office, 1974), 460; 1974 Census of Agriculture: Vol. 1, Part 51, United States Summary and State Data (Washington, D.C.: Government Printing Office, 1976), table 1; 1982 Census, text footnote 26, table 1.

ended. But New England farmers responded to the worldwide readjustments in the agricultural system and took advantage of new market opportunities by expanding dairy, poultry, vegetable, and fruit production. Between the 1870 and 1900 censuses in New Hampshire, for example, the amount of land in crops remained constant, with changes in the mix of what was grown; poultry increased from 507,000 to 878,000 birds, and the output of milk rose from 2 million to 29 million gallons.<sup>38</sup> When one considers the compelling evidence for productiveness of the region, combined with the opportunity provided by the expanding markets in northeastern industrial centers, the strength of agriculture in New England at that time is no surprise.

Taking into account the variable quality of the census data, except for Rhode Island there is no general downward trend such as might be expected even in very poor-quality data for a region experiencing a loss of one-half and perhaps more of its farmland in twenty years, as has been asserted.<sup>39</sup>

<sup>&</sup>lt;sup>38</sup> Munyon, footnote 34 above, 78-85.

<sup>39</sup> Raup, footnote 7 above, 6.

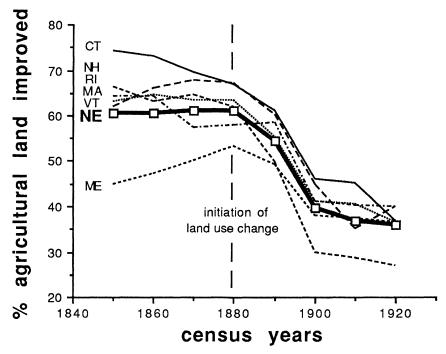


FIG. 8—Ratio of improved to total agricultural land in New England 1850–1920. *Source:* Fourteenth Census of the United States: Agriculture, General Report and Analytic Tables (Washington, D.C.: Government Printing Office, 1922), table 10.

Surely if that kind of massive decline had been under way, the census takers of the period could not have had enough faith in their numbers to publish the results without some explanation. Indeed, unless the census data were completely invalid, a position not even held by supporters of the early-decline thesis, they demonstrate a trend of increasing agricultural landuse at the very time when the traditional model posits a rapid fall, one of the most dramatic in agricultural history.

### MAGNITUDE OF THE DECLINE

A combination of census data and case studies allows identification of three periods for New England agriculture between 1850 and 1930. The first was a period of generally rising amounts of land in farms between the 1850 and 1880 censuses, with some local variations. Next came a stage of wide-spread readjustment and landuse change but continuing economic vitality that led to a plateau with perhaps a slight downward trend between the 1880 and 1900 censuses. Finally there was a rapid fall after the 1900 census in Connecticut, Massachusetts, and New Hampshire, and after the 1910 census in Vermont and Maine. Except in Rhode Island, little decline seems to have occurred in New England agriculture during the nineteenth century.

Writers in the traditional vein have often exaggerated the magnitude of the decline through selective and erroneous citing of census data. For example, one wrote that during two decades at the end of the century "more than half the improved land of southern New England and nearly half in northern New England passed out of active agricultural use." Yet according to the agricultural census, the decline in the three southern states was only 38 percent and in the north only 32 percent, mainly because of abandonment of high rocky sheep pastures. There has also been exaggeration of the percentage of land in New England that was in cultivation and pasture at one time. And, of course, exaggerating the extent of farming in the region at its peak made the subsequent decline seem that much more dramatic and inevitable.

The drama would have been much dulled if these writers had pointed out the contemporaneous decline in farmland elsewhere in the United States, but few did so. Although the decline in other areas was not as steep as that in New England, which, according to the census, lost 33.5 percent of its farmland between 1880 and 1930, the magnitude of decline elsewhere certainly lessens the significance of any agricultural problem specific to New England. New York and Pennsylvania lost 24.4 percent and 22.7 percent of their farmland during that period; smaller but still significant declines were recorded for several other states such as Maryland, which lost 15.4 percent, and Ohio, where the drop was 12.3 percent (Fig. 9). These decreases occurred mainly in the rapidly industrializing regions during the late nineteenth and early twentieth centuries, a period of worldwide agricultural readjustment. Additional misrepresentation stemmed from the lack of discussion of post-World War II farmland loss. Between the 1945 and 1972 censuses, New England lost 66.9 percent of its farmland, a figure accounting for 58 percent of the total decrease since 1880 (Fig. 7). By ignoring the postwar decline, which as early as 1964 had already roughly matched the 1880-1930 drop in magnitude, recent advocates of the traditional interpretation left the impression that most of the current absence of much agriculture in New England could be attributed to the nineteenth century.

## A CULTURAL-ECOLOGICAL MODEL

New England is not Iowa. At the beginning of the 1880–1900 plateau, only one-third of the land was improved, because much of the remainder, chiefly in Maine and New Hampshire, was indeed too steep or rocky or otherwise unsuitable for permanent cropping and meadowland. To this extent, the natural-resource potential of New England did constrain the course of agriculture in the region, for Yankee farmers were not ignorant of the land. But the land that was put into intensive production was good and high-yielding, and other returns came from extensive production on the

<sup>&</sup>lt;sup>40</sup> I. G. Davis, Agricultural Production in New England: Present Conditions and Major Problems, in New England's Prospect, footnote 5 above, 137–167, reference to 138.

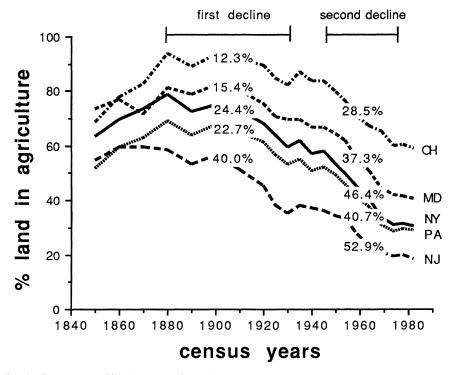


FIG. 9—Percentage of land in agriculture for selected states. Sources: see caption for Fig. 7.

marginal lands, so that, acre for acre of farmland, New England has always been one of the leading agricultural regions of the United States. While environment and comparative farm economics constrained New England agriculture, they cannot account for its decline.

This decline can best be understood primarily as the result of cultural change in rural New England. As the nineteenth century progressed, fewer and fewer rural New Englanders wanted to farm. An 1858 pamphlet entitled "Farm Life in New England" expressed concern about the trend and lamented "that the farmer's life and the farmer's home generally are unloved things." In 1853, Albert Comings told a meeting of the Connecticut Valley Agricultural Society that

Farming is now unpopular with the young men . . . it is also with the young women. They have come to associate the name of farmer with ignorance, with stupidity, with clownishness. 41

For a region long infused with the ideal of the yeoman, the emerging image of the rube was a remarkable change.

As industrialization proceeded, the lure of urban lifestyles grew ever stronger. It is not enough to suggest that the lure was merely the attraction

<sup>&</sup>lt;sup>41</sup> Cited in Wilson, footnote 5 above, 72.

of high income, because new migrants to urban areas often failed to achieve such wages. Furthermore, persons who have remained in farming across the country have always had lower incomes than their urban counterparts. The choice to remain in agriculture has long been more than an economic one. That there was the opportunity for greater wealth in the city, whether realized or not, cannot be denied, but the desire for increased wealth and material comfort is itself a cultural choice.

The effect of the urban lure was not felt only in New England. All urbanizing and industrializing regions of the east coast experienced this pull, and agriculture declined accordingly in most of them. As part of one of the most rapidly urbanizing and industrializing regions, rural New England felt the urban lure as strongly as any area, perhaps more strongly, which to some extent accounts for the greater decline in the region.

Many traditional explanations of the decline of New England agriculture also mention the effect of the urban lure, but the evidence presented here suggests a far more important role than previously assigned for the effect of urbanization and industrialization in the life choices of rural New Englanders. The evidence additionally stresses the importance of substituting the concept of agricultural adjustment for that of comparative advantage of agriculture elsewhere. By thus balancing the effects of cultural choice, ecological constraints, and changes in the worldwide agricultural system, the situation in New England can be explained without recourse to the traditional model.

Why did so many writers distort the history of New England agriculture in the face of considerable evidence long available to the contrary? One important factor may have been a general sense of loss of an age of close community life and cultural purity, felt to be a consequence of the rise of modern industrial and commercial life.<sup>42</sup> Also the supposed poverty of the small rocky farms and fields of New England became a prime exemplar in the highly mechanized, big-is-beautiful credo of twentieth-century agricultural efficiency.<sup>43</sup> The supposed inability of the region to compete with the vastness of the mechanized Midwest reinforced beliefs in the high-input, non-labor-intensive type of agriculture that is now receiving widespread critical scrutiny concerning its ecological sustainability.

Even at a symbolic level the negative portrayal has had its effect. Stone walls have become the primary commonsensical evidence of agricultural decline in New England. Yet alongside the countless stone walls, the land-scape is adorned with the opposite symbol: from the plain colonial saltboxes to the dandied Victorians, rural New England is filled with magnificent houses. The large, gracious houses lining many a town or village green were not built by hardscrabble farmers struggling to eke out a living from a stubborn soil. They were built by families that were often wealthy, that

<sup>42</sup> Barron, footnote 33 above, 52.

<sup>&</sup>lt;sup>43</sup> Richard D. Brown, The Agricultural-Industrial Transition in New England, *New England Quarterly* 61 (1988): 260–268.

turned capital originally derived from agriculture to the mercantile trade and early industry upon which the later urban transition in the region was based. Indeed, before widespread industrialization the problem was often where the many well-off farmers of New England could invest their accumulated capital. As stated in an 1839 farming monthly:

The almost universal condition of the inhabitants of Lyme [New Hampshire] is the possession of an abundance of the good things in life. The difficulty there is that most of the farmers have money to let and there are few speculators anywhere with credit sufficient to hire it.<sup>44</sup>

And Lyme was the town that went "downhill."

The evidence presented here does not deny that agriculture suffered a decline in Lyme or on the fields of John Sanderson's farm, which later became the Harvard Forest. These early instances of farmland abandonment did occur, usually on marginal land that other farmers were less likely to use in an age of declining interest in rural living. Yet John Sanderson must not have done too badly from his rock-strewn little fields; he left his farm to start a bank.

<sup>44</sup> Farmer's Monthly Visitor 1 (1839): 146.