

# Enclosure Then and Now: Rural Schools and Communities in the Wake of Market-Driven Agriculture

Paul Theobald and Ronald S. Rochon  
*Buffalo State College*

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*The following is an historically-based analysis of a new phenomenon affecting rural schools and communities: animal confinement operations. A contrast is made between "enclosure" as it unfolded in England a few centuries ago and the way animal concentration units constitute a second, "modern" form of enclosure today. In both instances, as this essay demonstrates, rural populations have suffered markedly.*

The central theme of this article is that we have unwittingly entered a second era of enclosure in the United States. The first one unfolded slowly in England between the sixteenth and nineteenth centuries. The process involved enclosing the commons—areas jointly held by neighborhood residents—so that animal husbandry could be intensified through the subsequent creation of large pastures. What followed was widespread dispossession and dislocation throughout England's countryside.

In many ways, England's enclosure movement was the first identifiable "national" response to the demands of a new creature—the market—a concept that slowly evolved in Europe during the sixteenth, seventeenth, and eighteenth centuries. The market gradually acquired enormous influence in the cultural development of England, in particular, and for that matter, its North American colonies as well. The allure of the market became so captivating that the creation of widespread rural poverty, even starvation, was no deterrent. This merely forced policymakers to create poor laws to deal with the hundreds of thousands of paupers created by enclosure. A contemporary of Adam Smith even proposed the creation of a House of Terrors for paupers—a move he thought would serve to inject needed industriousness among them.

In the United States today we are witnessing a second wave of enclosure—this one taking livestock out of large pastures and enclosing them in confinement barns or feedlots. The environmental and ethical dilemmas surrounding this development are many, and they are deadly serious. As a brief example, these animals must spend their entire

lives on antibiotics because the risk of disease among them goes up 100-fold living in confined conditions. Resistance development to these antibiotics is proceeding at alarming rates and, of course, this is passed on to the humans who eat these animals. If this isn't sufficient cause for concern, the advent of this second wave of enclosure has been coincident with a slow but steady rise in rural poverty in this country, creating slums of rural communities and forcing rural school districts to close or put up with conditions that no suburban parent would tolerate. Further, this second wave of enclosure places an ever larger percentage of the nation's food supply into the hands of a few multinational corporations—a circumstance that poses a substantial threat to any nation professing allegiance to democratic principles.

We will describe the similarities between the two enclosure movements, and, further, discuss their significance for rural communities and schools. We also will share examples of place-based pedagogical efforts designed to raise the consciousness of rural students regarding the impact of larger policy arenas on their families, friends, and neighbors.

## *Enclosure: Round One*

The age of New World exploration, specifically the sixteenth and seventeenth centuries, wreaked havoc on Europe's economic scene. The mass infusion of New World gold and silver contributed to a period of unprecedented inflation. The price of wheat and other agricultural commodities rose repeatedly between 1540 and 1640, a circumstance that some historians contend triggered the development of a kind of agrarian capitalism. The rising prices were a strong incentive for increasing production among those fortunate enough to own their own holdings. "Enclosure" was the most common method, and since until very recently there has been

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Correspondence concerning this article should be addressed to Paul Theobald, Buffalo State College, 1300 Elmwood Avenue, Buffalo, NY 14222. (theobapg@buffalostate.edu)

no contemporary practice that captures what it was, some explanation is required.

Most rural areas had strips or patches of land that belonged to no one but were held in common for the use of the entire neighborhood. Rules and regulations related to the use of the “commons” evolved out of the deep feudal past. In some cases these tracts of land were used for crop production, but more frequently they were used for grazing livestock. As textile production in England intensified—partially due to expanding trade networks made possible by technological innovations in navigation and in shipbuilding—the demand for wool skyrocketed, turning sheep husbandry into an extremely profitable niche market.

Even when wool demand ebbed during the eighteenth century, the pressure to enclose commons continued unabated, perhaps even intensified, as England’s farmers shouldered the burden of feeding the growing urban, industrial centers. The act of enclosure was devastating to the rural poor who relied on the use of the commons to make their slender ends meet. In fact, it is likely that enclosure and the rural depopulation it created was the largest single catalyst to the development of truly radical political ideas in the sixteenth and seventeenth centuries. Today we sometimes hear talk of “restoring the commons,” for in retrospect it is easy to see how the removal of the commons was coincident with the removal of a political dimension in the lives of average citizens. While the commons lasted, everyone in the neighborhood had a say in how the commons would be kept, and in who would play key stewardship roles related to its maintenance. As the victims of enclosure drifted into England’s industrial cities, however, they lacked even the vote. That reform measure didn’t arrive until the late nineteenth century.

From time to time there was significant royal opposition to enclosure, though kings were not particularly successful at stopping it. Parliament, dominated by landholders who stood to gain from it, predictably passed legislation to ease the enclosure process. The first such bill was passed in 1621. In 1633, however, when Charles I grew upset with Parliament and disbanded it for a period of years, he came down hard on enclosers, fining some 600 of them. This action only served to generate greater levels of antipathy between the Parliament and the Crown—antipathy that would ultimately end in civil war.

Because enclosures were generally tied to the intensification of wool production, they were often “hedged in” with vegetation that produced a kind of fence—or actual stone fences went up, though these were much more costly. This practice led to naming certain rural opponents of enclosure “Levelers,” for they often made clandestine trips to enclosures to level hedges or stone fences out of protest. The term would in time come to name a group of political protesters who sought to level the political and economic playing field, so to speak, by demanding a voice for com-

moners in the decisions that affected them. The Levelers would attract prominent members of the rural gentry and the urban merchant class and become a major political voice during the civil war years of the 1640s.

Agriculture, however, was not the only occupation that underwent significant changes as a result of whole-scale expansion efforts. Coal mining increased dramatically so that by the eve of the Civil War, England produced three times as much coal as the rest of Europe combined. It was used to fuel the burgeoning industrial centers, but it also enabled greater levels of iron and steel production, which in turn worked as a catalyst for a large range of industrial manufacturing operations that increasingly displaced small-scale craftsmen: everything from cannon and musket production to sugar-refining, paper production, soap-making, glass-making. And the list could go on and on.

The social fabric of English society was severely strained by a century of steady inflation, unremitting enclosure, and the head-long rush toward industrial development. Put simply, it was not a good time to be poor. Rural tenant farmers were displaced in large numbers, becoming urban dwellers too often unemployed or underemployed. As late as 1820, the Duchess of Sutherland carried out a massive enclosure, dispossessing 15,000 tenants from over 794,000 acres. The farmers were replaced by 131,000 sheep. Evicted families were given approximately two acres of marginal land on which to live (Heilbroner, 1961, p. 19). Unable to feed themselves from unproductive land, they drifted living as paupers. Those who found work, underpaid to start, continued to lose ground in terms of their ability to meet basic needs as inflation continued unabated. England experimented steadily with workhouses for the poor, mostly dispossessed rural dwellers. Emigration to North America, while attractive, was simply not an option for the poorest in England. With so many on the verge of starvation, child labor became a prominent fixture in industrial cities and on intensified farming operations.

It is quite likely that the amount of starvation throughout England between 1540 and 1640 rivaled the worst medieval shortage periods (Thirsk, 1967, pp. 620-621). Parliament answered with what became known as the Poor Laws (1531 to start, and many later variations all the way into the twentieth century). The law essentially created a tax in each parish to be collected for poor relief, but that relief was often hard to obtain as local parishes varied considerably in terms of their determinations regarding who was eligible (Slack, 1990). The nineteenth-century historian Thomas Carlyle was the first to point out the connection between widespread enclosure and the development of Poor Laws. In fact, the concept of poor relief itself, together with the deteriorating economic circumstances, triggered outbreaks of protest. In Northamptonshire in 1607, a “Leveler” protest turned violent. There were tenant farmer revolts in southwestern England during the late 1620s, and antienclosure riots all across England

during the first years of the 1640s. The homes of the wealthy were sometimes entered and plundered by “masterless men,” a common seventeenth-century phrase. Wagons carrying foodstuffs destined for urban centers were often stopped and forcibly emptied by groups of such men. Writing in 1642, Lionel Cranfield, Earl of Middlesex, remarked that “the countenances of men are so altered, especially of the mean and middle rank of men, that the turning of a straw would set a whole county in a flame and occasion the plundering of any man’s house or goods” (Hill, 1972, p. 23).

Had this kind of social unrest been confined to the rural poor—and to England’s countryside—it may be that the great political drama of the 1640s and 1650s would have never unfolded. England had endured peasant revolts throughout its medieval past (Dunn, 2002). With so many victims of enclosure ending up in the cities, however, particularly in London, the scale and potential consequence of rebellion increased dramatically. And the threat of urban protest was further augmented by the fact that many of England’s wealthiest merchants, bankers, and insurance dealers also lived in urban areas and were also disaffected by the policies of Charles I.

While historians argue about the impact of enclosure—how much starvation did it really cause? was it the necessary evil required to move England and Europe out of the stranglehold represented by a tightly connected church-state feudal system? was it the genesis of the Industrial Revolution? or of capitalism itself?—there are nevertheless a few ramifications that are beyond dispute. Rural villages across England slowly declined and disappeared during the eighteenth century, a phenomenon forever immortalized by Oliver Goldsmith’s famous eighteenth-century poem, “The Deserted Village,” and its most oft-quoted lines (Goldsmith [1770] 1927, p. 25):

Ill fares the land  
To hastening ills a prey  
Where wealth accumulates  
And men decay.

Goldsmith captured the economic nature of the enclosure enterprise and at the same time acknowledged the social cost to the rural residents of the English countryside. Farmers who spent a lifetime accumulating skill and even artistry in the myriad of tasks required by eighteenth-century agriculture, and were rewarded by the admiration and emulation of youth, found those same skills of no use in England’s burgeoning industrial cities. Further, where they once had a voice in local affairs, especially those related to the commons, this was totally absent after enclosure. Indeed, they lacked even the ability to vote. Last, through centuries of development, work habits and customs evolved that were very communal in nature, giving birth to festivals and celebrations that enhanced rural life in ways that were

totally absent after enclosure. A less well-known poem, “The Mores,” by John Clare provides perhaps an even better picture of the postenclosure rural countryside (Clare, [1812-1831] 1982, p. 415):

These paths are stopt—the rude philistine thrall  
Is laid upon them and destroyed them all  
Each little tyrant with his little sign  
Shows where man claims earth glows no more  
divine  
But paths to freedom and to childhood dear  
A board sticks up to notice “no road here”  
And on the tree with ivy overhung  
The hated sign by vulgar taste is hung  
As tho the very birds should learn to know  
When they go there they must no further go  
This with the poor scared freedom bade goodbye  
And much they feel it in the smothered sigh  
And birds and trees and flowers without a name  
All sighed when lawless laws enclosure came.

#### *Agrarian vs. Industrial Visions*

The colonies declared their independence at the very moment that a power struggle was underway in England, a contest for political hegemony between the landed agricultural interests and the new industrial, commercial, and financial interests. Victorious in their war for independence, the former colonists came together to make weighty decisions about how to replace the governmental and economic structures so familiar to them after 1000 years of feudal tradition. Would they overthrow one monarch only to set up another? Could they try to reproduce the Greek assemblies or the Greek confederation of city-state republics?

By the last half of the eighteenth century, there were two fairly well defined theoretical positions related to non-feudal, nonmonarchical governmental structures that were available to the former colonists. The first was generally described as the liberal tradition that grew out of the political theory advanced by Thomas Hobbes, John Locke, David Hume, and several others.<sup>1</sup> The other was generally called the civic republican tradition, and it was much older. Its roots were said to go back to the Greek and Roman republics. Aristotle, Cicero, and many other classical spokespersons were

<sup>1</sup>The emergence of the Enlightenment-inspired liberal tradition, at least in its eighteenth and early nineteenth century form, is sometimes called “classical liberalism” because of its debt to Plato, Aristotle, and other Greek and Roman political theorists. We prefer to refer to Enlightenment-inspired liberalism of that era as “modern” due to fundamental distinctions between it and the classical worldview. High on that list of distinctions would be the emphasis on individualism in definitions of human freedom and also crystallization of “rights” as a fundamental part of all subsequent political discourse.

counted among the architects of civic republican theory. Its primary eighteenth-century spokesperson was Charles de Secondat Montesquieu of France.

It should be acknowledged that the American system—first in the form of the Articles of Confederation and Perpetual Union, and later in the form of the present Constitution—borrowed heavily from both the liberal and civic republican traditions. John Locke legitimized the free pursuit of property and the right of property owners to a voice in the selection of political representatives. Montesquieu advanced the theory of the separation of powers and he was our source for the division of legislative, executive, and judicial governmental branches, each with a power check over the others.

But at their root, these political traditions—modern liberal and civic republican—differed profoundly. The modern liberal tradition viewed humans as fundamentally economic beings and thus the role of citizens was to enter into a contract with those who would govern and then go about their own business in the economic arena. There was nothing about liberal theory that suggested a great need for a literate or educated population. The improvement of citizens was not deemed to be an important part of the liberal project. Indeed, such an agenda could be an imposition on human freedom—the readily acknowledged supreme value driving eighteenth-century, and all subsequent, liberal thought.

In the civic republican tradition, on the other hand, humans were considered fundamentally social beings. As such, they were therefore also political beings. This being the case, civic republican theorists maintained that citizens require a political role to play with their lives. Since nation-states had grown well beyond the size of city-states, this meant that the political dimension in the lives of citizens had to unfold somewhere besides the national assembly. Montesquieu argued that all manner of local associations in communities all across the country could provide a stage for citizens to play that political role. The establishment of a county wool grower's association, for example, would most certainly call upon the correct political entity for policy amenable to wool production. With this kind of mass participation in local associations, the democratic life of republics would be constantly reinvigorated.

Montesquieu further argued that republics required an educational system capable of delivering “the full power of education” (Cohler, Miller, & Stone, [1748] 1989, p. 154). In other words, the civic republican tradition regarded citizen improvement as fundamental to the success of any experiment in republicanism. Further, Montesquieu argued that republics had to be small in order to be successful, for a large expanse of population or territory, in his view, would lead to the increasing centralization of power and an eventual return to despotism.

It is possible to look at the Articles of Confederation as a civic republican-inspired attempt to create a non-feudal

government, and the Constitution that replaced it as a modern liberal attempt to accomplish the same thing. Under the Articles, each state was to govern its own domestic affairs. In fact, the usual way to refer to states during the mid-1780s was to call them republics—13 separate, though united, republics. The role of the national government was limited to certain international commercial transactions and the common defense.

The careers of two of America's leading statesmen serve to set the different assumptions undergirding the two systems in sharp relief. Thomas Jefferson was the author of the Declaration of Independence, a leader of America's revolutionary war efforts, and a significant influence in the creation of the Articles of Confederation. Jefferson believed, in keeping with the civic republican tradition, that individuals needed a political role to play with their lives and, as a consequence, he was an advocate of small ward republics, small self-governing units about the size of townships. To ensure that this kind of democratic vision would work, Jefferson tried to create a free educational system in an attempt to deliver what Montesquieu called for, i.e. “the full power of education.” In fact, Jefferson introduced free school bills in Virginia on three occasions, albeit always unsuccessfully. He also spent years of his life on the founding of the University of Virginia.

Alexander Hamilton was the leading American spokesperson for the liberal tradition and a leading contributor to the creation of the Constitution. In keeping with Locke's view of man as an essentially economic being, Hamilton believed that citizens, assuming they held sufficient property, required little more than a say in who would make decisions in the political arena. Thus the only constitutionally sanctioned political role for citizens is to come out and vote once every 2 years, and achieving even this limited political role at a more or less universal level required subsequent constitutional amendments. Further, Hamilton favored a strong centralized government over a large national entity. In his essays defending the Constitution, published collectively with other essays by John Jay and James Madison and known as the Federalist Papers, Hamilton chastised Montesquieu claiming that if we followed his advice the United States would become “an infinity of little, jealous, clashing, tumultuous commonwealths, the wretched nurseries of unceasing discord, and the miserable objects of universal pity” (Wright, 1996, p. 126). Further, in the large corpus of Hamilton's writings, there is virtually no reference to educational efforts or to the nation's youth except for the use that can be made of them, “at a tender age,” in the nation's factories.

When the call came to amend the Articles of Confederation at a summer-long constitutional convention in Philadelphia, Jefferson, probably the most distinguished intellectual and politician in the new nation, was abroad in Paris serving as the U.S. Ambassador to France. He played no role at the convention, and he was critical of the document

produced there. In a letter to John Adams he remarked, “I confess there are things in it which stagger all my dispositions to subscribe to what such an assembly has proposed.” And he added a week later in a letter to James Madison, one of the primary constitution authors, “I own I am not a friend to very energetic government. It is always oppressive. The late rebellion in Massachusetts has given more alarm than I think it should have done” (Peterson, 1984, p. 913). This last remark concerning the “rebellion” is a key point to which we will return shortly. For now we must emphasize that Jefferson was a civic republican and the Constitution created in Philadelphia was a modern liberal document. There should be little wonder that Jefferson opposed it.

The Constitution was designed to limit the political role citizens would play in the interest of eliminating what Hamilton, Madison, and other constitutional architects liked to call “faction.” Citizens were economic beings in the first place. In fact, when Hamilton created his national bank, modeled after the Bank of England created a century earlier, he used the epithet “mind your business” on national coins—a phrase later switched to “In God We Trust.” All that was required of citizens in Hamilton’s view was to come out and vote every 2 years and, in effect, enter into a contract with those elected to govern. True to form, there were no educational provisions of the sort witnessed in the most famous work of the Confederation government, the Northwest Ordinance.<sup>2</sup> The Constitution says nothing about education.

As the nineteenth century unfolded, modern liberal views were increasingly the province of the powerful commercial and industrial interests in the new nation, while civic republican views were more commonly the preserve of the nation’s agrarian interests. This dynamic is probably most apparent in the events that led up to the call for the convention itself. Looming rather large on that list was a debacle known as Shays’ Rebellion—a little-studied farmer uprising in west Massachusetts.

Daniel Shays was a former Revolutionary War army captain who settled into a quiet farming life. He has gone down in history as the leader of a small armed rebellion—a group of farmers, perhaps a few thousand—who objected to a state law that required farmers to pay back debts in gold rather than using tender (farm commodities). Since gold was in short supply, many foreclosures occurred, a development that prompted farmers to band together and shut down court proceedings.

Boston merchants were outraged by these developments and they demanded that the national congress send an army to west Massachusetts to deal with the insurgents. While

congress requested funds from the various states in order to put an army in the field, many states refused to comply. This circumstance was heralded as all the evidence needed to prove that the Articles of Confederation was not the answer in terms of a governmental structure. The commercial and financial interests of the new nation wanted a powerful centralized government and they used Shays’ Rebellion as the motivation for the summer convention and the creation of a modern liberal-inspired Constitution.

A few years after the Constitution was ratified, groups of western Pennsylvania farmers protested Alexander Hamilton’s federal tax on alcohol production. With this development, George Washington had the perfect opportunity to demonstrate the new government’s ability to respond to agrarian insurgency. Washington himself inspected the troops sent off to Pennsylvania to put down what has become known as the Whiskey Rebellion. The army marched through Pennsylvania for weeks looking for some one who might present some resistance. Finding no one, they rounded up a dozen men who were rumored to have been a part of earlier protests. All were eventually released without charges. Thomas Jefferson referred to the incident as “the rebellion that could never be found.”

The two rural rebellions are symbolic, though, for the way they galvanized the industrial and commercial interests of the nation and pitted them against farming interests. Further evidence of this dynamic can be seen as industrial entrepreneurs began to tap the fast moving streams of New England to fuel blast furnaces and various milling and weaving operations. These dams inevitably created flooding problems, and in addition to this, they blocked the passage of Atlantic fish that used the streams for spawning—thus removing an important staple from local rural economies. Though farmers frequently took the millers to court, the rights of the millers were consistently upheld (Kulik, 1995).

After the creation and standardization of rail lines, the federal government gave away huge tracks of land to rail companies—49 million acres, or the equivalent of all of New England, New York, and Pennsylvania combined (Vogeler, 1991, p. 51). This version of corporate welfare dwarfed the amount of free land given to individuals under the auspices of the 1862 Homestead Act. And rail companies thereafter created grain elevators and mills so that farmers paid the same company whether they shipped or stored their grain.

On the interior plains during the 1880s and 1890s, farmers from Texas to North Dakota came together in one last effort to vie for control over the circumstances that defined their lives. The Farmers Alliance and the populist political movement that it generated went head to head with the party of commerce and industry in an attempt to establish cooperative mills and elevators, even a cooperative lending system, to undercut the power of the rail, grain, and banking industries. Hoping to carry the day in the presidential

<sup>2</sup>The 1785 and 1787 ordinances passed under the auspices of the Confederation called for setting aside one section in each township for the purposes of supporting public education. The ordinance authors claimed that “schools and the means of education shall forever be encouraged” (see Mattingly & Stevens, 1987).

election of 1896, the Populists threw their support to the Democratic candidate, William Jennings Bryan. Bryan was beaten by William McKinley in a close election. The farmers of the nation were defeated. They would never again represent a viable political force in this country. In fact, by the end of the twentieth century it had become completely permissible—even common—for presidential candidates to have absolutely no knowledge of, nor any particular interest in, agricultural policy. During the twentieth century farmers went from representing roughly half of the nation's population down to representing a mere 2%—the smallest percentage of any nation on earth.

Partially because enclosure was already an identified economic and social movement by the time England's North American colonies came to be established, the commons concept was not widely replicated in America. There were some, to be sure—Boston Commons provides the best example. But for all intents and purposes, the commons in what would become the United States was nothing like what it had been in England, and consequently U.S. agrarian history has been significantly different from that of England's, though similar dynamics have been at work.

#### *Enclosure: Round Two*

The demise of farming as a profession, especially during the last half of the twentieth century, was partially aided by the advent of what we call the second round of enclosure: the removal of farm animals from pastures into concentrated animal feeding operations. Just as with the first round of enclosure, this one has generated a cityward population drift. In addition to losing people, however, depopulating rural communities have also witnessed the loss of newspapers, hospitals, health clinics, schools, businesses of all kinds, and perhaps most significant, the loss of a sense of pride in their places. Osha Gray Davidson chronicled the demise of the rural Midwest in the wake of the 1980s farm crisis in a book called *Broken Heartland: The Rise of America's Rural Ghetto*. He demonstrated that a variety of business types have moved quickly to rural communities to take advantage of (a) unemployed or underemployed rural residents or non-English speaking immigrants willing to move to rural locales, and (b) incentives offered by increasingly desperate municipalities, e.g. "Build a plant in our town (or move into one of our unused buildings) and you'll be exempt from paying taxes or utilities for 10 years." Meat-packing operations have moved into the countryside away from the old large meat-packing centers and threat of unionized labor. Telecommunications operations have also taken advantage of the desperate conditions in rural America, quickly refurbishing existing buildings and plugging in phone lines. Sadly, meat-packing businesses, telecommunications companies, and many light manufacturing operations are quickly shut down when rumors spread about unionizing efforts, or when

the tax-breaks and incentives period has lapsed, ending the 10-, 15-, or 20-year free ride. It is at that point that many of these businesses will simply pull up stakes and move to a new rural community desperate for jobs.

The enclosure process began with poultry production. During the 1940s, feed companies created production contracts with farmers who invested in large structures capable of housing hundreds, and later thousands, of birds confined to small individual cages—so small that the animals could scarcely turn around. The grain companies supplied the baby chicks, feed, and veterinary supplies, and the farmers supplied the labor. In time, the terms of these contracts were re-arranged in favor of the large grain companies, meaning that increasingly farmers had to shoulder the burden of supplying feed and veterinary supplies. Tyson Feed and Hatchery was incorporated in 1947 and its owner, John Tyson, quickly became a leader in company-owned chicken farms. Ten years later, Tyson Feed and Hatchery created its own processing plant. The company went public in 1963 after being renamed Tyson Foods. As of 2003, Tyson produced seven billion pounds of chicken annually, the result of some 6,500 production contracts (Moeller, 2003, p. 8). It is now the clear leader in meat production in the United States, having expanded into pork and beef production. Michaels Foods, a leading egg and egg product producer, has dramatically increased the level of concentrated animal production, with millions of animals confined to a series of buildings in a small space no larger than an acre or two. Tyson, Michaels Foods, and other large poultry producers have notoriously utilized non-English-speaking immigrant labor—paying low wages with few benefits. In fact, in 2001 Tyson was indicted for conspiracy to violate United States immigration laws in a scheme to reduce labor costs (Moeller, 2003, p. 9).

By the 1970s, the enclosure trend begun in the poultry industry was successfully replicated in the pork industry. The overwhelming majority of hogs produced in the United States are now raised in cemented confinement barns on production contracts. During the last 2 decades, concentrated feeding operations have become the norm in dairy and beef production as well. Here, though, the animals are concentrated in small feedlots. Being natural grazers, so many cattle—thousands—in very small lots quickly eat or trample any vegetation that might have been on the ground at the start. The animals thereafter live out their lives on dirt that turns to mud with rain and snowfall. The animals become horrifically dirty from the mud and from the fecal matter of thousands of animals.

Large concentrations of animals—chickens, hogs, or cattle—produce enormous amounts of waste products.<sup>3</sup> Much of this is applied to nearby fields as fertilizer, but

<sup>3</sup>Animals in confinement operations in this country produce 13 times the amount of fecal waste as humans do (Environmental Protection Agency, 1999, p. 14).

often in amounts that are well beyond the ability of natural processes to handle. And the manure itself can carry disease rendering it dangerous. The smells from this process can become overwhelming, doing significant damage to the local quality of life, as well as to property values. Water quality is now a concern all across the country as manure-born nitrates and phosphorus from concentrated animal feeding operations make their way into the nation's groundwater supplies. Overly high nitrate levels can turn lakes into almost solid stands of underwater vegetation—ruining fish habitat and seriously impairing recreational activities.

The largest health concerns stem from the risk involved in concentrated animal feeding operations. One sick animal can quickly become thousands of sick animals. As a consequence, most confined animals are kept on antibiotics throughout their entire lives. Approximately 26.6 million pounds of antibiotics are given to farm animals each year, compared with about 8 million pounds administered to humans. Of the 26.6 million pounds, roughly 8% was administered to animals to treat an actual infection or illness (Brody, 2001). Of course, drugs administered to livestock can easily be transferred to humans. Many scientists believe that due to the ever-present development of antimicrobial resistance, the widespread use of antibiotics in farm animals may spur the growth of such resistance in human pathogens. It could well be that resistant strains of organisms, such as *E. coli* and salmonella, causing disease in humans are linked to the use of antibiotics in animals (Centner, 2004).

A particularly deadly disease, popularly called “mad cow,” technically, Bovine Spongiform Encephalopathy (BSE), is easily transferred from animals to humans. There has been, ostensibly at least, only one case of mad cow disease in a farm animal in this country, yet mysteriously, the number of human deaths due to CJD, or Creutzfeldt-Jakob Disease, has increased dramatically. We can't say by how much, because it is not a reportable disease in this country—unlike in England and Switzerland, for example, where the incidence of CJD doubled during the 1990s. We do know that CJD leaves a molecular signature that is indistinguishable from mad cow disease. We know, too, that it is very frequently misdiagnosed as Alzheimer's in older patients, as a severe viral infection or even multiple sclerosis in younger victims.

The disease spreads in animals because in an attempt to maximize profits, livestock are fed slaughterhouse scraps—those parts of animals, like intestines, etc, that are not packaged for human consumption.<sup>4</sup> And in the United States, unlike in Japan, for example, where 100% of animals butchered for consumption are tested for the disease, only 1% of all animals slaughtered in the United States are tested. Consequently, we may very well have large amounts of infected meat for sale in this country, resulting in the climbing rates of CJD. For the record, the British Health Minister called CJD “the worst form of death imaginable.” It literally

eats holes in the brain, prolonging an inevitable death for months. The prions that make up the disease are practically impervious to attempts to kill them. They will live through temperatures that would melt lead. As a consequence, it is nearly impossible to find a research center that will perform an autopsy on its victims—since the disease is so deadly and the likelihood of contamination so high.

None of this will reach the “liberal” news media, of course, because the cattle industry would be temporarily destroyed if it did. In a matter of years, most likely, the number of deaths and further research will make the connection indisputable—at which point major changes will take place in the industry. For the time being, though, there are huge profits to be made and the multinational corporations who control the news media will not interfere with their right to make them.<sup>5</sup>

#### *American Rural Schools and Communities*

The first wave of enclosure was demonstrably destructive of rural communities as Goldsmith forever memorialized in his poem, “The Deserted Village.” The second wave of enclosure—from large pastures into barns and feedlots—has been equally destructive of rural communities, but this time the destructive potential of enclosure has actually expanded beyond the lives of rural residents, to include the people living in America's cities and suburbs. All are at risk from tainted meats, dairy products, and groundwater. But even if researchers are able to stay one step ahead of antimicrobial resistance, even if they are able to continuously discover new antibiotics, the second wave of enclosure has reintroduced feudal conditions in the countryside. Large corporations distribute production contracts to men and women who were once independent operators but are now the modern equivalent of serfs.

Every year corporate mergers and buy-outs move control of the nation's food supply into fewer and fewer hands. The corporate-controlled news media in this country refuses to report these circumstances to the American public, wishing instead that Americans continue to believe that the food supply is safe and secure. In point of fact it is neither,

<sup>4</sup>In 1997 laws were enacted to prevent “ruminants from eating ruminants”—ending the legal feeding of dead cattle to live cattle. Some contend, however, that the practice has not stopped, and that, in addition, it is alive and well in the poultry and pork industries.

<sup>5</sup>Howard Lyman, a former Montana cattleman, has become a spokesperson of sorts for the BSE-CJD connection, doing his best to alert the country to this huge breach in the safety of our food production system. He told the story on the Oprah show and was immediately sued, as was Oprah, by the Texas Cattleman's Association. After 6 years in the court system, Lyman and Oprah prevailed. Still, the case prompted powerful lobbyists in 13 states to create and push through “food disparagement laws,” making it illegal to criticize or question food or how it is produced.

as the October 2006 spinach crisis demonstrated. And with the possible exception of near-total dependence on corporate-controlled energy resources, there is likely no greater threat to a democracy than near-total dependence on a few wealthy corporations for food. In such a world, citizens may be turned into hostages—perhaps an apt description of the millions unemployed or underemployed in American society—hostages to the incredible wealth generated by multinational corporations.

Thanks to the second round of enclosure, we are moving headlong toward inequities that dwarf those which defined the feudal world. This being the case, it would stand to reason that rural schools, at least, would be a veritable breeding ground for utilizing school subjects as an avenue toward sophisticated policy surveillance, for coming to know a great deal about the ecological health of one's home, for examining the safety and security of the food supply, etc. And while this sort of place-based instruction is happening in some rural schools, most are busy deploying tests, aggregating data, making reports, conforming to federal and state mandates—all without the slightest interest in acquiring some kind of consensus about the ends of education, what it is for, and how an educated person should wield it.

The stakes riding on the success of the educational endeavor in this country have risen in the last 2 decades—at precisely the same time that the nation's educational system has been paralyzed by standards and testing policy that actually works against the possibility of successfully educating all children at the highest level possible. If rural schools shouldn't equip rural citizens to understand why their communities are dying, why their health is threatened, why there are few or no decently compensated jobs, what are rural schools for?

#### References

- Brody, J. E. (2001, October 18). Studies find resistant bacteria in meats, *New York Times*, p. A12.
- Centner, T. J. (2004). *Empty pastures: Confined animals and the transformation of the rural landscape*. Champaign, IL: University of Illinois Press.
- Clare, J. [1812-1831] (1982). The mores. In J. Barrell & J. Bull (Eds.), *The penguin book of English pastoral verse* (pp. 383-384). New York: Penguin Books.
- Cohler, A., Miller, B., & Stone, H. [1748] (1989). *Montesquieu: The spirit of the laws*. Cambridge, MA: Cambridge University Press.
- Dunn, A. (2002). *The peasant revolt of 1381: Peasants' revolt and England's failed revolution*. Charleston, SC: Tempus Publishers.
- Environmental Protection Agency. (1999). *Preliminary data summary: Feedlots point source category study* (EPA-821-R-99-002). Washington, DC: Office of Water.
- Goldsmith, O. [1770] (1927). The deserted village. In A. Dobson, *The poetical works of Oliver Goldsmith* (p. 25). London: Oxford University Press.
- Heilbroner, R. L. (1961). *The worldly philosophers: The lives, times, and ideas of the great economic thinkers*. New York: Simon and Shuster.
- Hill, C. (1972). *The world turned upside down: Radical ideas during the English revolution*. New York: Penguin Books.
- Kulik, G. (1995). Dams, fish, and farmers: Defense of public rights in eighteenth century Rhode Island. In S. Hahn & J. Prude (Eds.), *The countryside in the age of capitalist transformation: Essays in the social history of rural America* (pp. 25-50). Chapel Hill, NC: University of North Carolina Press.
- Mattingly, P. H., & Stevens, E. W. (1987). *Schools and the means of education shall forever be encouraged: A history of education in the Old Northwest, 1787-1880*. Athens, OH: Ohio University Libraries.
- Moeller, D. R. (2003). The problem of agricultural concentration: The case of the Tyson-IBP merger. *Drake Journal of Agricultural Law*, 8(1), 1-24.
- Peterson, M. D. (1984). *Thomas Jefferson: Essential writings*. New York: Library of America.
- Slack, P. (1990). *The English poor law, 1531-1742*. New York: Macmillan.
- Thirsk, J. (1967). *The agrarian history of England and Wales* (Vol. 4). Cambridge, MA: Cambridge University Press.
- Vogeler, I. (1991). *The myth of the family farm: Agribusiness dominance of United States agriculture*. Boulder, CO: Westview Press.
- Wright, B. F. (1996). *Federalist papers*. New York: Barnes and Noble Books.