CHAPTER ELEVEN

Lighting Out for the Territories, 1861–90

"A Patriot's History of the United States"
Schweikart & Allen

Civilizing a Wilderness

Young Samuel Clemens (alias Mark Twain) gave up his brief career as a Mississippi steamboat pilot in 1861, setting out for the Nevada Territory aboard a stagecoach. Having tried his hand at gold and silver mining, he turned to newspaper work and a promising career as a writer. Clemens, in fact, moved west to escape the Civil War, a conflict in which he had served briefly and without distinction as a Confederate militiaman. He had no appetite for the kind of violence and devastation that consumed his fellow Missourians. Like his later literary character, Huckleberry Finn, Sam Clemens "lit out for the Territories."[1]

Many had gone before him, and many more followed. The period of manifest destiny, followed quickly by the Mormon exodus and the California Gold Rush of 1849, set the stage for a half century of migration by eastern Americans onto and across the Great Plains. Clemens was preceded by tens of thousands of anonymous fur trappers, cowboys, prostitutes, loggers, fishermen, farmers, miners, teachers, entertainers, soldiers, government officials, and business entrepreneurs, in addition to Mormons, Jesuits, Methodists, and other missionaries. In the 1860s, while the Civil War raged "back east," Clemens and a new generation headed west.[2]

In 1893 historian Frederick Jackson Turner wrote that this generation had succeeded so well that the American frontier had at last come to an end. In his brilliant essay, "The Significance of the Frontier in American History," Turner traced the course of the westward movement from Revolutionary times across the Appalachians and the Mississippi River. He pointed to the 1890 census report stating matter-of-factly that western America had achieved a density of population that rendered the term "frontier" inapplicable.[3] Turner undoubtedly portrayed America's western experience as unique—but how? Was Turner's thesis right?

Turner used the 1890 census report as a watershed to assess the impact of the frontier experience on the American people. He rejected the idea that Europeans had molded American culture and argued that it was the American frontier experience that had created a unique American civilization, providing a safety valve for the release of societal pressures. He ascribed to the West and westerners specific character traits, most of them positive, but some unsavory. Arguing that the West made Americans democratic, egalitarian, nationalistic, pragmatic, and adaptive, Turner also contended that frontier life made them coarse, violent, anti-intellectual, and wasteful of natural resources. Yet even as he wrote, lumbermen like Frederick Weyerhaeuser, railroaders like James J. Hill, and meat packers like Gustavus Swift had begun taking extraordinary measures to preserve the environment. And where Turner saw a violent, often barbaric West, the so-called Wild West may have been less violent in many respects than modern society.

Most western men were neither John Wayne types looking for a fight nor helpless citizens waiting for a frontier hero to rescue them. In regions where judges rode a circuit and came to town, with any luck, once a month, there naturally existed a tendency to take law into one's own hands. Where every animal had its claw, horn, tooth, or sting—many of them potentially fatal—and where every human had an incentive to jump a claim, steal livestock, or become offended at the slightest insult, a necessary violence literally went with the territory. Nor was the West a Marxist model of class struggle: for every saloon brawl that started over "class interests," fifty began over simple insults or alcohol.

On the other hand, frontier individualism was not ubiquitous, and westerners could cooperate when necessary. Towns first united to bring the cattlemen in, then passed laws to keep them out; then cattlemen joined the townspeople to keep the sheepmen out; then ranchers and farmers of all types sought to keep heavy industry out. Nor were these patterns unique: a century later it was the same story: heavy industry sought to keep computers and electronics out. Those who settled the West for better and, occasionally, for worse, tamed a wild frontier. They left a legacy of romantic accomplishment that even to the present contains important messages and images for Americans.

Time Line

1843: First large Oregon Trail wagon train
1846–47: Mormon exodus to Utah
1848: Mexican War ends; New Mexico Territory, California ceded to United States
1849: Gold discovered at Sutter's Mill, California Gold Rush begins
1850: Compromise of 1850 admits California as a state
1853: Gadsden Purchase completes map of lower continental United States
1857: Butterfield Overland Stage provides passenger and mail route to California
1859: Comstock Lode discovered

1860: Pony Express begins operations
1861: Civil War begins
1862: Homestead Act; Morrill Act; Plains Indian wars begin
1864: Sand Creek massacre
1865–85: Cattle Kingdom reaches its apex
1866: Fetterman massacre
1867: Grange movement begins
1869: Transcontinental railroads join at Promontory, Utah
1876: Custer massacre
1882: Edmunds Act
1885: Chief Joseph and Nez Percé surrender
1887: Dawes Severalty Act
1890: Wounded Knee massacre
1893: Frederick Jackson Turner declares frontier closed
1896: Alaskan gold rush

Wagon Trains, Stagecoaches, and Steamboats

Before the completion of North America's first transcontinental railroad in 1869, westbound pioneers continued to use varied means of transport.[4] Thousands drove wagons over well-worn, often muddy trails and helped break in some new ones. An era of private road building in the early eastern frontier areas gave way to a willingness to use the state and national government to improve transportation.[5] Pony Express riders and horsemen traversed these trails, and travelers booked passage on stagecoaches. Members of the famed Mormon handcart brigades literally walked the trail west, pushing their belongings in front of them. Meanwhile, sailboats and steam-powered ocean vessels brought immigrants to the West via the coast of South America and hard-working steamboats navigated rivers. Decades after the coming of the railroad, nearly all of the above routes and means of transport endured in one form or another.

Although the settlers of the 1830s still used muskets, increasingly the Kentucky long rifle had come into use, extending range and accuracy. After the Civil War, breech-loading Sharps, Spencer, Winchester, and Remington rifles (with repeating action) were available. The first repeaters had appeared in the Civil War, and with minimal practice a man or woman could squeeze off a dozen shots in less than thirty seconds. Many men carried sidearms—usually a Colt revolver—and knives, or tomahawks, or other weapons were always handy in case of snakes or predators.[6] When combined with circled wagons for defense, settlers had a good chance of warding off Indian attacks with such weapons.[7]

The route north of the North Platte River became the Mormon Trail, blazed by the Mormon exodus to Utah (1846–47). Army engineers built or improved upon additional trails throughout the West, such as the Bozeman Trail, a supply route stretching north from Fort Laramie in present-day Wyoming to the Montana country. In Washington Territory the army built the 624-mile Mullan Road (named for its surveyor, Lieutenant John Mullan) between 1859 and 1862. Connecting Fort Benton, the head of Missouri River steamboat navigation, to Fort Walla Walla, near the navigable lower Columbia River, the Mullan Road was cut by the army in order to transport troops and supplies. Soon, however, hundreds of miners, missionaries, entrepreneurs, and farmer immigrants cluttered the trail, turning it into a vital route for 1860s gold seekers bound for mines in the present-day states of Washington, Idaho, and Montana.

Stagecoaches were vital common carriers—commercial transporters of mail, freight, and passengers. Like many western businesses, stagecoach companies began small and then earned enough capital to become larger firms. Eastern coach companies begun by Henry Wells (who ran a string of speech therapy schools in New York), John Butterfield, and William Fargo became the basis of the famous modern firms American Express and Wells Fargo. The Butterfield line opened its southern route running through Texas to California in 1857.[8] In 1860 the California Stage Company ran the seven-hundred-mile route between Portland, Oregon, and Sacramento, California, in an impressive six days. Beginning in 1852, Wells, Fargo & Company, California Stage's famed competitor, offered service out of San Francisco to most of the West's mining districts. In 1862, Ben Holladay, the "Stagecoach King," briefly challenged Wells and Fargo before selling out to them in 1866, and then founded the Oregon Central Railroad. For a brief moment, between the stagecoaches and the telegraph, the Pony Express filled the gap for rapid delivery of mail.

Steamboats ran the upper Missouri, Sacramento, lower Columbia, and other western rivers throughout the years before the Civil War. From 1850 to 1860 a dozen small competitors vied to haul miners and supplies along the Columbia and Snake rivers to Lewiston, in present-day Idaho. Their tough, low-draft steamers symbolized a rough and ready era of independent rivermen who navigated around rocks, shoals, and numerous dangerous drift logs in swift currents, rapids, and falls. In 1860 the Oregon Steam Navigation Company bought them all out, controlling the trade (with twenty-six steamers) until 1880.[9] During this time the company built the Northwest's first railroad track, a mere six miles, to facilitate transshipment of steamboat cargoes around the Celilo Falls of the Columbia River. This little stretch of track marked the tender beginning of the western stretch of what would become the Northern Pacific Railroad.

The Iron Horse Races West

American railroads had already started to undercut prices in river traffic by the Civil War. Railroads stretched into Missouri and Wisconsin, and construction continued westward after the war. Most students of history are familiar with the subsidized transcontinental railroads that received millions of acres of federal land to support their construction. The other side of the story, however, is that hundreds of local train lines and two transcontinentals—the Great Northern and the Milwaukee Railroad—were funded and built purely with *private* capital. So, when the Union Pacific and Northern Pacific Railroads lobbied Congress after the Civil War, contending that only government could help them complete their

transcontinentals, they were wrong. James J. Hill soon built a more efficient competing line without government aid, and so too did the owners of the Milwaukee Railroad. Private roads not only survived panics when subsidized roads failed, but the owners of unsubsidized lines also spent their own funds to relocate farmers (future customers) along their routes, to invest in agricultural research and livestock breeding, and to ensure that the lines, once completed, would remain healthy. And, it is worth noting, the private companies—on their own—arrived at a national railroad track width standard without any involvement of government, universally agreeing to the 4-foot-8.5-inch standard by 1886.[10]

Transcontinentals provided countless benefits, ending the isolation of many westerners and providing them with "metropolitan corridors." Life was better with easier travel for visiting friends and relatives, and leisure destinations as well as for conducting business. In thousands of western towns, the railroad station became the hub of community life, where locals eagerly awaited the daily arrival of freight and passengers, and the railroad's telegraph office became a vital link to the outside. Before radio, westerners gathered around railroad telegraphers to learn presidential election results, international news, and even the scores of football and World Series games. Railroads also contributed to the rise of America's national parks as America's first generation of ecotourists booked passage aboard special spur lines created by the Great Northern, Northern Pacific, and Southern Pacific railroads to tour Glacier, Yellowstone, and Grand Canyon National Parks. Railroad entrepreneurs like Henry Villard, in fact, plotted the routes of their lines to showcase the West's majesty, and when buffalo became a major attraction at Yellowstone Park, park officials attempted to ensure that passengers could see the buffalo herds from the train.[11]

The Natural Resources Frontier

Trends seen in the evolution of natural resource extraction industries—fur, fish, ore, timber, ranching, and agriculture—actually parallel several of the patterns of the stagecoach, steamboat, and transcontinental railroad industries. Entrepreneurs tended to start out small, but larger concerns soon came to dominate, largely because technology and capital were necessary to efficiently harvest natural resources. An important result of this efficiency, however, was a tendency to overharvest in the short term—a failure to conserve natural resources—which quickly produced higher prices and efforts to moderate extraction in the longer term.

Although historians have been quick to blame this environmental waste and destruction on the forces of free-market capitalism, once again the picture is not so clear.[12] In opposition to laissez-faire principles, the federal government often played a major role in leasing or giving federal land to miners, loggers, farmers, ranchers, and fishermen, distorting incentives by making resources cheap that, had the market had its way, would have come at a much higher cost.[13] Then, as today, federal and state governments, not market forces, regulated many natural resource industries and often did so poorly, actually undercutting market forces that would have adjusted prices and, therefore, supply. Contrary to the "capitalist menace" view of the environment and extraction-related industries, it was the existence of so much *public* land—the absence of *private* property—that was the main detriment to responsible stewardship of western natural resources.[14]

As we have seen, fur trappers were the first to overharvest public lands. The American Fur Company, which flourished under the often heavy-handed direction of John Jacob Astor, began diversifying into emerging industries.[15] Before the British retreated to the forty-ninth parallel in 1846, the Hudson's Bay Company was harvesting, drying, and pickling western salmon for export to Europe. Following the Civil War, American entrepreneurs cashed in on the revolutionary changes brought by the invention of the canning process. Canned fish, especially salmon, reaped spectacular profits for large concerns like Hapgood, Hume and Company, which employed thousands of Scandinavian immigrant fishermen and Chinese cannery workers. Like the fur trappers, fishermen overharvested the public waterways; as early as 1877, trap and net fishing had interrupted and stifled salmon spawning. At the mouth of some western rivers, the armada of fishing boats was so thick during the salmon spawning season that fishermen could literally walk from deck to deck over the hundreds of fishing boats; industry technology was so efficient that it threatened its own long-term survival.

In the case of fur and fish, the early American legal system had not yet developed appropriate ways to privatize property rights so that those responsible for using the resources bore the full cost.[16] Often, industrial polluters would dump waste in streams and rivers without owning any more than a small section of waterfront land. Other industrialists, however, displayed much better stewardship: Frederick Weyerhaeuser and Gustavus Swift, for example, voluntarily monitored replacement of resources and pollution as commonsense responses to wise land management. It was simply good business to ensure a constant supply of one's raw materials, whether trees or cattle.

The rush to mine the West's rich veins of gold, silver, and copper ore also brought technology, capitalization, and environmental waste. While the Civil War raged back east, miners fanned out to seek gold in the present-day states of California, Nevada (site of the famed Comstock Lode), Washington, Idaho, and Montana. Afterward they tried their luck in Colorado, in the Black Hills of the Dakotas, and near the turn of the century, in the newly acquired Alaska. Canadian gold rushes in the Fraser River Valley of British Columbia and the Yukon Territory, saw similar patterns and usually drew the same multinational work force.

In the early stages, mining rushes were peopled by individualistic entrepreneurs—the fabled sourdoughs equipped with only a pick and shovel, a gold pan, a few months' grubstake, and a mule to carry it all to El Dorado. Very

few struck it rich, and most prospectors soon gave up and moved on to better pickings. Some took advantage of collaborative efforts to strike it rich. Groups of miners replaced single panning with rockers, sluice boxes, and Long Toms, with which they channeled fast-moving river water to strain dirt and more efficiently search for gold. The crude sluices, however, soon gave way to hydraulic mining—the use of powerful pumps and water hoses to wash down and cull entire hillsides in search of ore. Hydraulics of this magnitude required capital and expertise, which brought large companies and professional management and mining engineers. This evolution was completed with lode mining—the use of dynamite and rock crushers to separate veins of gold, silver, and copper ore from hard rock buried deep within mountainsides. By the time lode mining had begun, the sourdoughs and their sluices had long departed, and many of those who had come west to strike it rich found themselves working for a paycheck in company towns like Butte, Montana, or Globe, Arizona.

While gold fever was claiming one sort of western immigrant, the thick forests, rich with spruce, cedar, pine, and Douglas fir trees, were beckoning another type, the logger. Although the Hudson's Bay Company had built a major logging and saw-milling operation in and around Fort Vancouver in 1827, smaller entrepreneurs also soon flocked to the West, drawn by the sheer abundance of natural resources. Western loggers followed water routes, floating timber down navigable rivers leading to sawmills like those at the mouth of the Columbia and Sacramento Rivers, and on Puget Sound (Port Blakely and Port Ludlow), Grays Harbor, Washington, and Coos Bay, Oregon. The railroads' need for hundreds of thousands of railroad ties provided an important early market.

This small-scale decentralized logging business was revolutionized in the 1880s with the introduction of the narrow-gauge railroad, which made it possible to cut forests far away from navigable rivers. Innovations such as crosscut saws, donkey engines, steam loaders, and steam-powered band saws, which could increase mill output tenfold, dramatically changed and improved the ways loggers felled, loaded, and processed timber.

This was all capital-intensive technology, which meant that small entrepreneurs soon gave way to larger better-financed firms like the St. Paul and Tacoma Lumber Company and the Weyerhaeuser Company, which themselves had started small. Weyerhaeuser himself went broke in 1857 but soon tried again.[17] His genius lay in his ability to see the final product and to understand the business concept of vertical integration, whereby the company owned all the various parts of the production process, from raw material to transportation to sales. By 1885 his Beef Sough Company processed some 500 million board feet of lumber. At that point he still tended to use the forests as if they were infinite, but in 1900, having purchased nearly a million acres from the Great Northern Railroad, Weyerhaeuser's inspectors found that the lands were not nearly as rich in timber as he had thought. That discovery forced him—as market forces do—to focus on reforestation, preventing soil erosion, and on fire prevention. Then, as today,

more forest lands are destroyed by fires (most caused by lightning) than are lost by harvesting. (The historian of fire in America, Stephen Pyne, found that from 1940 to 1965, when fire prevention techniques were far more advanced than in Weyerhaeuser's time, lightning started some 228,000 fires in the United States, burning up to a million acres in a single forest!)[18] Weyerhaeuser and, soon, other paper giants like International Paper and Kimberly-Clark began massive reforestation programs in which the companies planted, on average, about five times more than they consumed.[19] Kimberly-Clark, in 1902, became the first producer of paper products to embark on a long-term woodlands management program, employing hundreds of professional foresters before the U.S. government entered the arena of forest conservation.[20]

Whenever possible, of course, companies sought to use federal funds and federal lands while leasing and harvesting as many state and federal tracts as could be acquired. Interestingly, the Weyerhaeuser Company's ultimate dominance of northwestern logging (the company owned 26 percent and 20 percent, respectively, of all Washington and Oregon timber stands) was an indirect result of federal largesse. Frederick Weyerhaeuser bought his Northwest empire at six dollars per acre from his St. Paul, Minnesota, neighbor James J. Hill; Hill had obtained it when he bought the extensive federal land grants of Henry Villard's bankrupt Northern Pacific. Weyerhaeuser proceeded to build the world's largest sawmill in Everett, Washington, in 1914.[21]

A much different industry developed on the plains where, from 1865 to 1885, the West witnessed the rise and fall of the Cattle Kingdom. Prior to the Civil War, when thousands of cattle populated the Texas plains, with ranches stretching into Oregon and California, ranchers had shipped cattle to New Orleans. A special breed of cow, the Texas longhorn—derisively referred to in the East as "eight pounds of hamburger on eight hundred pounds of bone and horn"—could thrive on range grasses without additional feeding, and those cattle proved especially resistant to the ticks that carried Texas fever.[22] Ironically, however, the resistance to the fever made the Longhorn a dangerous presence in the East where the ticks fell off and soon infected other nonresistant breeds, leading to an almost-uniform quarantining of Texas Longhorns prior to the mid-1860s. Then, by accident, drovers found that freezing temperatures killed the ticks: if a herd was held over on a northern range during a frost, it could be tick free. Joseph G. McCoy, the founder of the town of Abilene, Kansas, was among the first to appreciate the benefits of both Abilene's cold weather and its location. He encouraged ranchers to send their herds to the Kansas Pacific Railroad's railhead in his town, which offered transportation to eastern markets.[23] Jesse Chisholm (not to be confused with another cattle trailblazer, John Chisum) cut a trail from Texas to Abilene in 1867 (the Chisholm Trail), with his cowboys driving some 35,000 head north in the first year alone. More than 2 million cattle came up the

Chisholm Trail during the next twenty years.[24] Cattle barons like Charles Goodnight and Oliver Loving established their own well-worn trails for getting herds to the railheads. Boom towns sprang up to accommodate the cattle drovers as the railroad lines extended westward.[25]

From 1865 to the 1880s, the cattle frontier was in its prime.[26] Ranches such as the King Ranch and the XIT Ranch covered thousands of acres, and tens of thousands of cattle arrived in Dodge City every year during its heyday, in the process creating one of the most thoroughly American figures in history—the cowboy.

There was something special about the American cowboy. Everything from his clothing to his entertainments to the dangers he faced seemed to represent both the best and worst of young America. Typical drives lasted weeks. During that time, upward of a dozen or more cowboys spent every day on horseback and every night on hard sod with only a saddle for a pillow. Meals came from the ever-present chuck wagon that accompanied the drives, and they usually consisted of beans, bacon, hardtack, potatoes, onions, and whatever game might be killed along the way without spooking the herd. The wagon master drove the chuck wagon, cooked, handled all sewing and repair chores for the cowboys, set up and broke down camp, and when necessary was doctor or vet. Any cattle spotted along the way that had no visible brand were immediately roped, branded, and inventoried into the herd. Cattle required water at regular intervals, and the trail boss had to make sure he did not misread a map and cause an entire herd to die of thirst. Indians or white squatters frequently had control of strategic watering holes, for whose use which they extracted a hefty tribute from the desperate cowboys.[27]

Once the herd reached the railhead, the cattle went into stockyards to await trains to the Chicago slaughterhouses while the dusty and thirsty cowboys took their pay and visited the bars and bordellos. That was what made the cattle towns so violent—a combination of liquor, guns, and men nearly crazy from the boredom of the drive. Yet outside these railhead towns, and excluding a few of the episodes of gang-type violence, the numbers of capital crimes in the West appear to be well below current violent crime rates, so the Wild West was only moderately more violent than the rest of society.[28]

Historian Roger McGrath studied the Sierra Nevada mining towns of Aurora and Bodie, which had more potential for violence than other western towns. There he found that homicide rates were high, especially among the "bad men" who hung out at the saloons, although the homicide rate was about the same as in modern-day Washington, D.C. Yet he also discovered that virtually all other crime was nonexistent, certainly due in part to the presence of an armed populace. Robberies in Aurora and Bodie were 7 percent of modern-day New York City's levels; burglary was 1 percent; and rape was unheard of.[29]

Another study, by Robert Dykstra, of five cattle towns with a reputation for violence—Abilene, Ellsworth, Wichita, Dodge City, and Caldwell—discovered

that the total cumulative number of homicides was less than two per year. Again, rape and robbery—except for trains and stagecoaches—was largely unknown. Still another researcher, examining Texas frontier towns from 1875 to 1900, found murder to be rare—not counting "fair fights" staged by gunslingers. Burglary and theft were so absent that people routinely did not lock their doors. Even in the California gold fields, with all its greed, researchers found little record of violence.[30]

For a brief time it seemed as if the cattle frontier and the ubiquitous cowboys would never disappear. During the 1880s the price of beef skyrocketed, and large European investment firms entered the market; in 1883, for example, Wyoming alone hosted twelve cattle firms with $12 million in assets. But because none of these cattlemen owned the land on which their cattle grazed—the public domain—none had much interest in taking care of it. By 1885 there were far too many cattle overharvesting the grass of the public lands of the Great Plains. Tragically, the weather turned at the same time the cattle were short of feed. In the winter of 1886–87, temperatures plummeted to lows of minus 68 degrees Fahrenheit. Hundreds of thousands of cattle died of starvation, unable to graze the barren Plains.

The cowboy was usually the last in a line of characters to reach a town before civilization set in. Following the trappers, miners, soldiers, and missionaries, the cowboys inevitably gave way to the next wave of settlers, the farmers. The Homestead Act made available land in the form of 160-acre grants to 400,000 individuals and families from 1862 to 1890.[31] Total improved acreage in the United States rose from 189 million to 414 million acres, and although the Homestead grants were marked by fraud, the westward migration of legitimate farm families, and the economic and environmental impact of that migration, brought a staggering change to the demography and environment of the American West.

In true frontier fashion, new western farmers adapted to the semiarid conditions that awaited most of them. New steel-bladed John Deere plows sliced through prairie soil that had lain dormant for centuries; and barbed wire, developed by John Warne Gates, became a standard fencing material on the treeless Plains.[32] Windmills pumped ground water, and pioneers learned Mormon techniques for dryland farming and irrigation. Corn, wheat, and oat crops were complemented by alfalfa for winter feed for cattle and sheep herds; then, later, fruit, vegetables, potatoes, and sugar beets emerged as important crops in California, the Great Basin of Utah, and on the Columbia Plain.[33]

Yet frontier farmers found themselves pushed out by an emergent, highly industrialized agribusiness sector. For example, the typical farm size of 160 acres, a figure determined by unrealistic politicians in the lush eastern United States, was woefully inadequate to support Plains agriculture. Drought, harsh winters, and competition from agribusiness combined to hurt small producers. Only capitalized firms could afford the equipment—steam-powered tractors, combines, harvesters, and irrigation technology—that characterized successful farming west of the Mississippi. The small farm in America truly died more than a hundred years

ago of its own inefficiency, when two thirds of all homesteaders failed. Even when farming proved profitable, life on the frontier beat down the sodbusters (who got their name from breaking ground with their plows) and their families with periods of mind-numbing boredom mixed with near-death situations. Wild animals, poisonous reptiles, deadly diseases, drought, subzero cold, and blazing heat all combined to make prairie living exceedingly hard. Sodbusters had to ward off clouds of locusts, track down stray horses, keep their wells safe, and watch out for strangers or Indians. Their nearest neighbor might be miles away, and the closest town often a day or two's ride. Generally, a prairie family would purchase supplies for a month and might not see other humans for weeks.[34] No one in a farm family had much leisure time: farm life involved backbreaking work from well before sunrise until after sunset. Farmers often ate five hearty meals a day. They rose before sunup, ate an early dawn breakfast, took a mid-morning break for another small meal, returned at lunch, had a late afternoon snack, and then ate a full-scale dinner after sundown. That meant that wives spent virtually their entire lives cooking, cleaning up from one meal, then starting another. And cleaning in a house made of sod—dirt!—itself constituted a monumental task. Despite low pay, sodbusters tried to hang on because of the independence farm life offered and the opportunity they had to own land. Nevertheless, most went broke, and those fortunate farmers who eventually did acquire their property after paying off the mortgage still faced problems: seldom did crop prices increase enough for them to expand operations.

But there had to be something to it: from 1860 to 1910, the number of farms in America tripled. This dynamic placed some 50 million people in an agricultural setting, cultivating "500 million acres, an area as large as western Europe."[35] Such farm-sector expansion was accelerated by something as small as a sharp piece of wire sticking out from a twisted wire at regular intervals—barbed wire. Joseph F. Glidden and Jacob Haish, two Illinois farmers, patented barbed wire in the mid-1870s, and by decade's end production had soared to more than 80 million pounds, costing less than $2 per 100 pounds. The appearance of barbed wire carried profound significance for the Plains, where little wood existed, and it benefited from the sales pitch of John Warne "Bet-a-Million" Gates, who trained a herd of docile steers and used them in his demonstrations. In fact, the wire worked as advertised.[36] Wire did what innumerable judges, sheriffs, and even vigilantes could not: it secured the property rights of the small farmer against the cattle barons. And it took little to lay new wire if a farmer was fortunate enough to expand his holdings. In the short run, this forced the constant westward migration of the cattle drovers; in the long run it probably secured the viability of large agricultural operations.

Farming, milling, lumbering, mining, ranching, and harvesting of natural resources in the American West thus exhibited striking consistency. Small producers and entrepreneurs began the process, only to be superseded by large capitalized firms that could afford the technology necessary to efficiently harvest

fur, fish, timber, ore, cattle, and foodstuffs. In so doing, they produced riches that benefited millions of Americans. The evidence shows that those who enjoyed government favors and subsidies abused the resources the most; whereas those who had to pay their own way proved the best conservators of our natural heritage.

Ultimately, the story of the harvesting of natural resources in the West is far from a tragic one. Rather, it is a story of transition and adjustment. The settlement and expansion of the trans-Mississippi West exactly paralleled the rise of the Industrial Revolution and the subsequent decline of small producers and farmsteads in America toward the end of the nineteenth century and reflected a growth in manufacturing.

Without question, some of the generation that migrated west following the Civil War paid a hard price for modernity. Most never found their dream of a western Eden. Yet in the long run, a great many of them found a level of independence and prosperity unheard of in Europe. Those who did adjust, and their children after them, reaped the many benefits the Industrial Revolution and modernity brought in increased standards of living and life expectancy. Only one group was largely left out of either the rising prosperity or the expanding political freedom in the West—the original inhabitants.