Golden Harvest: The Columbia Plateau Grain Empire
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By Glen Lindeman

Wheat, oats, barley and other grains have been a staple of mankind for millennia; their intensive cultivation was a primary building block in the development of civilization. Grain was no less important to the Pacific Northwest’s early pioneers who depended on it for more than sustenance. Hard cash and coin were rare in the old Oregon Country, and little of it circulated through the frontier economy. Consequently, grain substituted as a medium of exchange in fledgling communities, much as gold dust served mining camps. Recognizing this fact, the Oregon Provisional Government in 1845 declared wheat a legal tender at its market value.

Obviously, such basic agricultural products as grain and livestock were the pioneer’s main source of wealth. And, of course, it was the staff of life. Biscuits, bread and boiled wheat were main foods on the table, and roasted wheat grains, brewed in pots, served as a substitute for coffee. Wheat is a durable low-bulk commodity, making for cost efficient handling, storing and shipping. For the pioneers, it was an ideal agricultural product for selling in distant markets where demand was high.

In the frontier era extensive grain growing occurred on both sides of the Cascade Range. By the late 1800s, though, its main focus had shifted eastward to the Columbia Plateau where growing conditions were excellent. In fact, prime wheat land in the Palouse Hills along the Washington-Idaho border would prove to have a higher per acre yield than acreage in any other major grain-growing region in the nation. Wheat production, in its many facets, profoundly affected the landscape, city and town development, and the very economic and social fabric of the Columbia Plateau.

Settlement of the Columbia Plateau came in a century of "agricultural revolution," when great changes in farming techniques swept through the world’s vast grain belts. Homesteaders in the mid 19th century plowed with single-bladed “foot burners,” hand-broadcast seed during planting, and harvested with cradle scythes.

In the 1870s and 1880s elaborate horse- and mule-powered machines of amazing complexity and diversity replaced the simpler tools and implements. These newer machines could only be operated by large crews. Iron-clad steam tractors, looking somewhat like off-track locomotives, appeared in the last quarter of the 19th century. The heyday of animal-powered technology, however, was yet to come in the 1910s and 1920s, when teams of as many as 33 horses or mules pulled great combines over the steep hills. Gasoline- and diesel-engine tractors and caterpillars took hold in the late 1930s, replacing the dutiful draft animals.

The Columbia Plateau
The great grain belt of eastern Washington overlaps into adjoining parts of Idaho and Oregon. The region's borders are the Cascade Range on the west, the Okanogan Highland to the north, the Bitterroot Range on the east, and the Blue Mountains to the south. The mostly treeless and hilly Columbia Plateau receives 20 inches or less of precipitation on its more elevated eastern and southern portions. Deep, rugged basaltic canyons of the Snake and Columbia river systems bisect the region's high prairies.

The soil of the Columbia Plateau is largely fine-grained, yellowish-brown, extremely fertile loam ideal for "dry-land" wheat farming (i.e., without irrigation). This loess soil apparently was deposited over many millennia by prevailing southwesterly winds blowing across the Cascades and central Washington and Oregon.

Though this region sears in heat and drought during long summers, lush clumps of native bunch grass flourish nearly everywhere. Blue-bunch wheat grass (normally just called bunch grass) is most common, but giant wild rye, Idaho fescue, and Sandburg bluegrass are also present. Beginning about 1725 large bands of Indian horses grazed on the bunch grass plains, especially in the southern plateau and the Palouse Hills. A little over a century later pioneer cattlemen eagerly drove their herds onto this rich range. Incidentally, the name for the famous spotted-rump Indian horse known as the "Appaloosa" came from the expression "a Palouse" horse.

Frequently described as treeless, the Columbia plain actually has some timber such as cottonwood, willow and pine lining watercourses, particularly in the more moist eastern and southern sections as well as in the Horse Heaven Hills of Klickitat County. A comparative shortage of wood posed a problem for pioneers in most areas, however, and families resorted to burning cow-chips, sagebrush, and dried wild sunflower roots in stoves. Firewood frequently was hauled from the forested ridges surrounding the Columbia Plateau. Log or sod cabins were rare; more typical were board and batten houses made of lumber cut at sawmills in the peripheral mountains. Fencing a claim could cost as much in time and materials as erecting all the other structures on a homestead combined, including the cabin and barn.

Early frontiersmen never doubted that crops would thrive in the moist flats or "bottomland" next to streams. When gazing upon the boundless dry hills, however, their common farming experience (derived in the much wetter conditions of Oregon's Willamette Valley, or in the Ohio Valley and other areas of the East) made them believe that no crop could grow on the waterless plateau. They thought the rolling prairies were too dry for planting and thus suited only for grazing livestock.

In due time, it came as a great surprise when the "barren" hills proved exceedingly fertile, despite the lack of summer rain. Wheat yields per acre would be the highest of any major grain district in the nation, despite lower precipitation than in most grain belts. In the latter part of the 19th century this revelation caused the United States Senate to order an investigation of "the rainless regions of Oregon and Washington" to explain the unexpected fertility. The Columbia Plateau's great productivity was no mystery, of course, but was due to ideal growing conditions and the scientific and technological advances of the farming industry.

Frontier Agriculture

First plantings of wheat in eastern Washington occurred during the earliest phases of white settlement. Beginning in the 1810s and '20s, American and British fur traders raised grain, vegetables, fruit and livestock at Spokane House, Fort Walla Walla (originally named Fort Nez Perce), Fort Colville, and probably other locations. Parallel developments occurred at posts west of the Cascades. Eventually, the Hudson's Bay Company (HBC) planted extensive gardens along the lower Walla Walla River. The site of one of these farms (near present-day Walla Walla) later came to be called "Hudson's Bay" by early American settlers.
By 1837 missionaries likewise tilled soil. Marcus Whitman, at Waiilatpu, also near present-day Walla Walla, tried converting free-roaming Indians into sedentary Christian farmers. In this, Whitman and the other early Protestant and Catholic missionaries generally failed. The missions, however, did help prove that crops could thrive east of the Cascades.

Henry Spalding, at the Lapwai (Idaho) mission in 1846, had come to the remarkable conclusion that grain grew well not only in the moist bottomlands, but also on the dry upland prairies. At that time, almost everyone else considered the plateau to be nothing less than a part of the "Great American Desert." Spalding was forced out of the region during the Cayuse War (1847-1850), however, and it was left to others to rediscover the fertility of the uplands many years later.

A legacy of the HBC and missionary period was that some Indian groups accommodated basic farming skills into traditional, semi nomadic life ways. Famous Yakima war chieftain Kamiakin kept gardens near the Catholic mission on Ahtanum Creek in the Yakima country. Timothy, a Nez Perce headman, maintained crops and an orchard at Alpowa Creek on the Snake River. The Spokanes continued cultivating the soil after white traders abandoned Spokane House in the 1820s, and other Indian groups tilled ground elsewhere.

In the early 1860s a series of gold strikes in the mountains of Idaho, eastern Oregon, western Montana, and central British Columbia profoundly accelerated the development of agriculture in the region. The Columbia corridor, from Portland through Walla Walla, was a primary route to the gold fields, which swarmed with at least 20,000 to 25,000 wealth seekers. Commerce stirred to life as the incoming population demanded food and supplies. Newly arrived farmers at Colville and Walla Walla responded quickly, selling foodstuffs in the diggings.

New homesteaders planted the Walla Walla bottomlands while continuing to regard the hillsides and high prairies as too dry for crops. Then, to everyone's astonishment, some Walla Walla farmers sowed and reaped grain in the rolling uplands. It was probably the most significant discovery in Washington's agricultural history, but, apparently, the names of the men who did the planting are unrecorded. It is known, however, that one of them sowed 50 acres on hilly terrain in the fall of 1863 and harvested 33 bushels per acre from the same the following summer. Most settlers continued plowing bottomland for a time, but wide-spread "dryland" farming of the broad uplands was just around the corner. Farsighted observers now recognized wheat as a new kind of gold, more long lasting and valuable than the wealth of the mining districts which by the late 1860s was declining.

The Railroads Arrive

The mines, military posts and fledgling towns created local markets, but the fact remained that sustained agricultural growth and prosperity could only come when the Columbia Plateau became effectively tied into the national marketplace. Railways were the obvious answer, but little could be done as long as the Civil War exhausted the nation's resources. Besides, California, because of its relatively large population, had first priority in getting a transcontinental railroad. In the 1860s and into the 1870s Northwest farmers could do little more than wait for the coming of the tracks.

Beginning in the late 1870s nearly 80 sailing ships a year hauled Columbia Plateau grain from Portland to California, the East Coast and England, but high transportation costs cut deeply into small profit margins. It was time-consuming and difficult for the region's farmers to haul their wheat to steam-boat landings on the Snake and Columbia rivers. Hauling grain by sternwheeler down the Columbia to Portland was particularly costly due to the unloading and reloading of freight at the railroad portages around Celilo Falls and the Cascade Rapids.
Farmers' wishes were answered in the early 1880s when the Northern Pacific and the Union Pacific built separate railways to the Pacific Northwest. Branch lines quickly spread across the Columbia Plateau.

During the next three decades Northwest agriculture expanded and was altogether transformed to a degree unimaginable in the early settlers' wildest dreams. Not only did railways haul produce out, mainly to Columbia River and Puget Sound ports, but immigrant coaches from the East brought great numbers of homesteaders to stake claims in the Columbia Plateau. Before this time, settlers had come principally from western Oregon. But with the railroads arrived emigrants from the East, the Midwest, Canada, northern and western Europe, and the Pacific Slope.

Urban areas likewise grew rapidly, further stimulating the need for food production. By the end of this remarkable 30-year period Washington's population in 1910 was 15 times greater than in 1880. Railroad-sponsored propagandists and other regional promoters liked to compare the Columbia Plateau to such famous wheat districts as the Russian steppe, Sicily's rich volcanic regions or the north China plain.

The Land is Settled

In the late 1850s and early 1860s homesteading in the Columbia Plateau was focused south of the Snake River in the Walla Walla, Touchet and Tucannon watersheds. The mid 1870s saw the beginning of the great wave of migration to the Palouse Hills north of the Snake which stimulated the establishment of steamboat landings on the river to accommodate settlers. During the 1880s farmers continued to be drawn to the moister, more fertile southern and eastern portions of the Columbia Plateau. After these areas were filled up by the early 1890s, immigration shifted westward to the drier, less arable Big Bend and the Horse Heaven Hills. In neighboring Idaho the rich Camas Prairie country remained largely unplowed until 1895 when the Nez Perce Indian Reservation was opened by allotment.

Claims averaged 160 acres, being the maximum amount allowed by homestead and preemption rules. Other acreage sometimes was added by less utilized government programs such as purchasing state school lands at public auction, or planting trees on barren ground under the provisions of the Timber Culture Act. Thousands of settlers acquired farms by purchasing railroad-owned lands at reasonable rates. The United States Congress had granted alternate sections to the Northern Pacific as a subsidy for building the first, and very costly, northern transcontinental railway. Consequently, the Northern Pacific rivaled the government as a landholder with vast acreage to sell in the Columbia Plateau. Other privately-owned companies dealing in large-scale land speculation were relatively rare.

Economic Maturity

By 1905 the expanding eastern Washington agricultural sector surpassed California as the main wheat district on the Pacific Slope. The Columbia Plateau now was one of three major grain belts in the nation (along with the Dakotas and Kansas). Columbia Plateau grain production had been fully integrated into the American market system and, consequently, now was subjected to the ups and downs of national economic cycles. A prosperous boom period had coincided with the spread of settlement throughout the 1880s, only to be followed by the Panic of 1893 which caused farm prices to plummet drastically. Across the nation, both rural and urban localities came on hard times. The settlement of less desirable parts of the Columbia Plateau had slowed significantly during this period, particularly in the Big Bend and the Horse Heaven Hills.

With the return of prosperity at the turn of the century, farming became quite profitable again, though many homesteaders in the drier western sections of the Columbia Plateau still went bankrupt after just a few years. It became clear that 160 acres could not sustain a family in the less fertile Horse Heaven Hills, Big
Bend, and western Palouse, where more farmers were defeated than made good. Those who survived consolidated nearby holdings until more successful farms of several hundred acres became common.

It was far different in the fertile arc of the eastern Palouse and the rolling terrain south of the Snake River. Here prosperity was a given, though farms had less acreage than the consolidated holdings farther west. Population densities and the number of towns were significantly greater; the large number of substantial well-built barns and other farm structures reflected greater wealth and abundance. Also, in the moist uplands farmers could plant barley and oats as rotation crops or alternatives to wheat. Oats fed draft animals and barley was used in brewing.

Throughout the Columbia plateau farmers continued to rely overwhelmingly on wheat as the major cash crop. Wheat monoculture encouraged the adoption of large horse- and mule-powered machines to cover extensive acreages. Work animals pulled cultivators, gang and walking plows, harrows, weeder, drills, hay racks, mowers, binders, headers, wagons, header boxes, sleighs and other equipment being produced by a competitive and innovative American implement industry. After 1900 massive combines pulled by as many as 33 horses or mules became a common sight at harvest time.

Prosperity generally continued unabated into the 20th century and even accelerated with an increase in demand during World War I (1914-18). Grain, bringing high prices, was sold to England, Italy, the Azores, South America, China, Japan, the Philippines and elsewhere. Prosperity in the Columbia Plateau was at a peak seldom equaled before or since.

Depression Down on the Farm

Following the boom times of the first two decades of the 20th century, farmers looked confidently to the future, but prices fell unexpectedly in the 1920s - a prelude to even greater depression in the 1930s. European agriculture had revived after World War I, resulting in sharp cutbacks on American farm imports. Consequently, worldwide wheat prices plummeted, a situation exacerbated by surpluses from the American midwest, Canada, Australia, Argentina, and other world grain belts. All sectors of agriculture suffered in this era.

Despite a national and worldwide glut, Columbia Plateau farmers held on, particularly those who used good business sense and were fortunate enough to own good land. Yet, even in the fertile Palouse some farmers were forced out. In Whitman and Walla Walla counties, for instance, there were 15 farms lost in 1921, more than 20 in 1922, and 45 in 1923. Competitiveness and efficiency encouraged consolidation of smaller holdings into large units. The 160-acre farm was out-dated, and by 1925 the average wheat grower in Whitman County had expanded his holdings to 414 acres. For some farmers barely managing to hold on through the 1920s, the end came during the Great Depression of the 1930s. In that decade, farm foreclosures continued at the same significant rates as in the early 1920s. Drought played a partial role during this period also, mainly in the Big Bend.

The Modern Era

Full revival came with the greatly increased demand for wheat during World War II, and prosperity continued into the affluent post-war decades. Exports to Third World countries were exceptionally profitable in the 1960s and early '70s. Wealth and progress during this period were at a peak.

Acreage left in summer fallow to replenish the soil was a common sight until chemical fertilizers were introduced in the late 1940s. Since then, the application of modern fertilizers has eliminated fallowing on
most farms, and crops now are planted on the land every year. Nitrogen fertilizer, which is the most important nutrient for Columbia Plateau wheat, is literally extracted from the air at commercial plants. Known as anhydrous ammonia, it is produced by combining hydrogen (from natural gas) with nitrogen (from the atmosphere). Special drill-like implements dragged across the fields inject the fertilizer directly into the soil. Such agricultural engineering has made possible harvests of 100 bushels or more per acre.

For more than a century, Columbia Plateau farmers have experimented with a wide variety of wheat seeds to find the types best suited for local conditions and needs. The list is a long one, since experimental strains were constantly adopted. Little Club, of Mediterranean vintage, was introduced early, about 1859, and widely used thereafter. Prominent types used in the late 1800s and early 1900s included Turkey Red (from southern Russia via Kansas), Jones Fife (a New York hybrid), Bluestem and Early Baart (from Australia), Fortyfold or Gold Coin (from New York), Red Russian (from England), Salt Lake Club, Mediterranean Red, Jenkins, Crooked-Neck Club and others. As their names indicate, these wheats originated in the widely scattered grain belts of the United States and the world.

By the 20th century various state and federal agencies, including Oregon State University, the University of Idaho, and Washington State University, began developing and introducing specialized wheat types for the region. By the 1920s, new disease-resistant varieties appeared to counter destructive new fungi. In the 20th century alone a series of 30 or more harmful smuts have invaded Columbia Plateau wheat fields. Black, powder-like smut eliminated grain in the husks and could cause dangerous explosions in combines during harvest. New seed types have been just as quickly developed to thwart the attackers.

Another innovation of recent decades has been the planting of dry peas and lentils as alternate crops in the Palouse uplands. In the 1960s this successful development resulted in the Columbia Plateau producing more than 90 percent of the nation's peas and lentils.

Agricultural trends, however, are ever cyclical, and after four decades of unprecedented prosperity, the wheat industry once again faced depression in the 1980s. The root cause of the modern agricultural crisis is a familiar theme, overproduction resulting in falling prices and low demand both nationally and worldwide.

But Columbia Plateau farmers are resilient. Their acreage is among the best in the world, and they know an upturn inevitably will come. Today, their huge rubber-wheeled tractors and self-contained combines roll inexorably over all but the steepest inclines. Despite this fabulous mechanization, ghosts of the horse and mule days remain, weed-strewn corrals, abandoned water troughs, and name plaques above empty stalls such as in the Heilsberg barn, west of Colfax, where "Daisy," "Blackie," "Andy," "Flossie," "Floria," "Pearl," "Bill," "Fanny" and "Charlie" formerly bedded down in the cool summer evenings, munching oats after long days in the sun-washed fields.

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Sidebar 1

EVOLUTION OF FARMING TECHNOLOGY

The earliest frontier farmers used horses, mules or oxen to pull homemade or imported plows to break or scratch the virgin sod. Thickets of wild rose, knee-high wild sunflower, and, in places, sagebrush proved...
difficult to eradicate. An early practice was to burn off the native bunch grass and shrubs before the initial turning of the soil.

This was the era of the infamous "foot burner" - a single furrow, metal-bladed plow pulled by teams of two and sometimes three work animals. The implement’s wooden framework had a pair of back handles that were grasped by the farmer walking behind. A "foot burner" with a single steel blade also was called a single bottom plow. Double bottom plows (two blades and six horses), triple bottom plows (three blades and eight horses) and occasionally even four bottom plows (four blades and sixteen horses used only on flat terrain) also were utilized, breaking two or three times as much sod as the single furrow plow. The larger implements had a seat for the operator.

The "dryland" farming methods commonly adopted in the Columbia Plateau entailed deep initial plowing followed by frequent cultivation to retard moisture loss by capillary action. Each year fields were tilled as many as six, eight or ten times, creating a "dust mulch" to preserve a maximum amount of moisture in the soil. This remained a common practice until the 1930s when it became obvious that the technique allowed too much wind and water erosion. Even in modern times contour plowing and modern equipment and methods have only partially alleviated erosion problems.

Particularly in the drier areas, the need to conserve moisture and control weeds in fallow ground was critical. This led to the development of the most important cultivator, the rod weeder. Perfected a short time after 1900, the rod weeder consisted of a metal frame to which was attached a square metal rod that rotated just under the surface of the ground, severing weeds from their roots.

Harvest came late summer and early autumn. In the early 19th century some Indians, fur traders, and other frontier farmers probably threshed grain by the ancient means of flailing. A flail was an implement consisting of a free-swinging stick loosely fixed to the end of another, longer stick that served as a handle. Grain stalks were laid on a flat surface and beaten by hand with the flails. By this slow, laborious means, grain was broken out of the husk. Running horses over cut wheat was another, more common method of threshing.

In the mid 19th century, hand-held cradle scythes commonly were used to cut grain during harvest. With a sweeping motion, the scythe’s steel blade severed swathes of grain stalks, and the attached cradle-like framework allowed the field hands to drop the loose bundles of stalks evenly on the ground, making it easier to pick up for threshing. Horses normally were run over the stalks spread out on the barnyard to complete the harvesting process.

The simpler tools and techniques soon were discarded for horse- and mule-drawn equipment of various types becoming available by the 1870s, if not earlier. The only limitations were transportation costs, it was difficult and expensive to haul farm implements from the East by wagon or sailing ship. Local blacksmiths, artisans or farmers themselves, of course, custom manufactured much of the needed equipment.

Sidebar 2

GREAT ERA OF ANIMAL-POWERED TECHNOLOGY

The coming of the railroads in the 1880s allowed farmers to acquire the latest and biggest farm machines. Draft animals were utilized in all aspects of farming, from plowing to seeding to harvesting. Horses generally were medium sized, of thoroughbred, Clydesdale or Indian pony ancestry. Mules likewise were present, in fewer numbers but with some advantages over horses. Mules would not overheat or over drink on torrid days and generally stood heat better. They worked at a regular pace, were more manageable in larger
teams, and would not work to the point of collapse. Horses, on the other hand, were often stronger and pulled faster.

Large, self-propelled steam tractors, up to 12 feet high and weighing 15 to 25 tons, were a common (and unforgettable) sight at harvest time, particularly from the 1880s through the first decade of the 20th century. Coal, wood, kerosene or straw burned in their iron bellies, and horse-drawn wagons, mounted with 400-to 500-gallon tanks, fed water to the boilers. The metal lug-wheeled giants could pull plows and other implements across level ground, but did not operate effectively in the steep, hill terrain of the Columbia Plateau. Thus, iron monsters never gained wide acceptance for plowing, but instead found an important niche at stationary threshing sites during harvesting. Separators or harvesters, having no power of their own, were driven by long rubber belts running from the steam tractors.

Headers were common on large acreages. These grain-mowing machines were pushed from behind by horses or mules, thus the standing grain out front was not trampled. Headers cut off about ten inches of wheat stalk and ripe head. A built-in conveyor system then dropped the stalks into special wagons called "header boxes" being pulled alongside. The boxes of these unique wagons were high on the left side, but low on the right to accommodate loading. Filled "header box" wagons proceeded to a threshing station, where self-propelled steam tractors supplied belt-driven power to separators or threshing machines. An efficient pulley system dumped the load from the "header box" into the thresher. Grain was threshed, bagged in burlap sacks, loaded on wagons and hauled to railroad sidings or steamboat landings.

Harvesting at the turn of the century required large numbers of men and draft animals to operate a wide variety of implements and vehicles. It was an expensive, labor intensive, and complicated process. The implement industry soon developed a revolutionary new machine called a "continual" harvester or "combine," which did cutting, threshing and bagging in one operation, thus consolidating harvesting activities into a single machine.

Combines originally were developed in the 1880s for the flat terrain of the great "bonanza" wheat farms of central California. As early as 1891 the Holt Company of Stockton, California, designed a "sidehill" machine with a leveling device for the rolling Columbia Plateau. Early combines were cumbersome and expensive, however, and a rarity in eastern Washington until about 1906 when new, improved machines appeared. In the 1910s and 1920s they came into wide use, eliminating most of the "old fashioned" harvest equipment and up to 80 percent of the work force formerly needed at threshing time. Multiple hitching of 24 to 33 horses or mules to elaborate machinery became a striking feature of the Columbia Plateau, to a degree uncommon in most other wheat producing areas. Ironically, the massive self-propelled steam tractors no longer were needed and passed from the scene.

Animal power remained at the forefront of Columbia Plateau agriculture throughout the first third of the 20th century. Something of an anachronism in a modern age, once seen they were a sight never forgotten.

Sidebar 3

GAS, DIESEL AND ELECTRIC MECHANIZATION

In the late 1930s, farming technology again was revolutionized, this time with the widespread adoption of rural electrical systems and gasoline and diesel-engine tractors, caterpillars and trucks. These innovations had been present early in the century, but did not become prevalent until the eve of, World War II.
Rural electrification allowed grain to be handled in bulk, rather than by the old labor-intensive sacking method. Machine-powered augers and bulk tanks actually had been developed early in the century, but Columbia Plateau farmers preferred to manhandle grain in jute bags holding 130-plus pounds (two bushels) of wheat. With widespread electrification in the 1930s, however, producers finally switched in mass to machine bulk handling, saving labor, time and expense. Modem roadways also facilitated the use of bulk-carrying grain trucks.

Tractors and caterpillars gained wide acceptance only after improved models were introduced by the late 1930s. The new machines worked faster; eliminated labor, and, unlike horses, could operate at night and required no care in winter or other times when not in use. Horses and mules, now unwanted, were sold off wholesale to logging outfits or to horse dealers from the sharecropping regions of the South. Some unfortunate animals went to slaughter for hog or pet food. It was a difficult time for farmers who were attached to their horses and mules and had names for each one.

Modem mechanization meant that the day of small cash and acreage wheat farming was also gone. Large capital outlay and expansive holdings were required to keep a farmer in the business. Yields increased, but so did competitiveness with the continuing improvements in machinery and technology. The modem equipment of today requires only a third of the manpower needed to operate the machines used at the time of World War II.

With the disappearance of horses and mules from farming some 50 years ago, fences no longer were needed and have now all but disappeared. After years of working the land, however, the indelible memories of farmers instinctively know where unmarked property lines lay on the terrain. The rolling Palouse country always has remained boundless, seemingly deserted, and scenic. Even today the Columbia Plateau, especially when under a blanket of winter snow, appears much as the vast, unfettered landscape of over a century ago must have looked.

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