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The Great Plains

By Thomas D. Isern

Two landmark works in the agricultural history of the Great Plains appeared in the same year, 1931: *The Populist Revolt*, by John D. Hicks, and *The Great Plains*, by Walter Prescott Webb (Hicks 1931; Webb 1931). These are books so significant--not that they are considered current, but that they are touchstones and foils--they may be deemed (along with their immediate predecessor, Ernest Staples Osgood's *The Day of the Cattleman*) headwater-works for the field (Osgood 1929). Written by aspirational academics grounded in the region, they sowed the seeds and, as Webb liked to say, cared not for the birds. Several generations of scholars have worked this ground since the days of the Osgood-Hicks-Webb trinity, while public memory, as expressed by county histories, community monuments, and rural rituals continues to confirm the centrality of agriculture, even as the number of farmers dwindles. The Homestead National Monument, created during the Dust

Bowl era, at the site of Daniel Freeman's homestead near Beatrice, Nebraska, in 1862, cinched a federal buckle on the farm belt of the plains.

In both popular conceptions and scholarly treatments, however, the Great Plains lurk as a challenging, even hostile environment for agriculture. Film clips from *The Plow that Broke the Plains* are as pervasive in historical documentaries as was the phrase, Great American Desert, in nineteenth-century geographies. The environmental dominance of historical narratives, whether triumphalist or declensionist, suppresses deeper discussions of regional agricultural history.

Moreover, scholarly treatments and public discourse treat prairie agriculture as a problem, a regional subset of what is nationally known as "the farm problem," with prairie farmers to be pitied, corrected, and helped.

Three corrective tropes are emerging to open up and re-energize such dead-end discussions. The first of these is the longue durée, recognizing that our conventional conceptions of regional agricultural history derive from the relatively brief experiences of Euro-American agriculturalists. What is required is to go deeper in time, at the same time enlarging the definition of just what constitutes agriculture. The second corrective is to embrace complexity, allowing not merely multiple causes but interdependent causes for emergences in the field. The third corrective is to recognize agency in the historical actors of Great Plains agriculture, to upend the assumption that environment or economics or any other disembodied

factor determines developments and to make human agents the protagonists of agricultural history. An agricultural history constructed along these lines promises to retire the subject of Great Plains agriculture as an impoverished problem and redefine it as a rich narrative--thereby, too, enabling a constructive sense of place and identity among regional agriculturalists.

Among the Hidatsa people, farmers for centuries in the upper Missouri River Valley on the northern plains, women controlled the agricultural agenda and did the field work. During the growing season, detachments of girls and young women ascended adukati', platforms erected among the corn, beans, and sunflowers, to keep watch over the crops, scaring away birds and driving off boys who were likely to pilfer the green corn. "You bad boys, you are all alike," they would sing, but they also sang songs to the corn, because the corn responded to them and thrived. To read of the agricultural practices of the Hidatsa is to be reminded of several pertinent facts in the agricultural history of the Great Plains: that American Indians were the first farmers of the plains; that although anthropologists chose to label as "Plains" those native cultures characterized by keeping horses and hunting bison, there were other indigenous ways of life perhaps better suited to the region for the long term; that agriculture need not be a male-dominant pursuit, as it was for most Euro-Americans; and that the Great Plains need not be considered a

hostile environment. To the Hidatsa and the other village farming peoples of the plains, they were a comfort landscape, even kin, a mother.

The classic narrative of village farmer lifeways began its life in print as Agriculture of the Hidatsa Indians: An Indian Interpretation, a title befitting an anthropological treatise, but later was retitled Buffalo Bird Woman's Garden, a title recognizing the agency of the teller of the story instead of its recorder (Wilson 1917; Wilson 1987). Maxidiwiac, Buffalo Bird Woman, gave her remembrances and wisdom to the clergyman-scholar Wilson during the years 1906-1918, when she and some others still persisted in many traditional practices. It was a fruitful partnership that revealed not only the rich culture of the Hidatsa but also the impressive expertise and productivity of their agriculture. The crop cultures described by Maxidiwiac possessed a material toolkit in which the bison-scapula hoe, often stashed under the sleeping platform of an older woman, figured prominently; demonstrated a good grasp of environmental conditions, from soils to climate; recognized the virtues of diverse genetics in crop varieties; devised ingenious methods of production and preservation; and involved the entire community in the food system.

The agricultural prowess of the Hidatsa, along with their neighbor peoples on the upper Missouri, the Mandan and Arikara, attracted the attention of the pioneer seedsman, Oscar Will of Bismarck, North Dakota, who appropriated their

crop varieties for his seed catalogs. His son, George F. Will, not only joined in the family business but also was something of a renaissance man who did archeological and anthropological work and was the lead author of *Corn among the Indians of the Upper Missouri* (Will and Hyde, 1917). Will focuses his descriptive work on the farming cultures of "the agricultural tribes" as distinct from "the hunter tribes." He concludes with a chapter on "Varieties" including an eighteen-page register of those possessed by the individual tribes. For a seedsman, this was an homage as well as a reference.

The narrative documentation on the village farming peoples of the central and southern plains is not so impressive, but archeological work fills the deficit, especially that of Waldo R. Wedel--who, being Mennonite himself, and thus representative of another prairie culture with strong agricultural values, paid close attention to agriculture among the peoples who figured in his excavations (Wedel 1941; Wedel 1947; Wedel 1986). His early work on the Quiviran peoples (ancestral to the Wichita) encountered by Francisco Vazquez de Coronado in 1541 establishes them as accomplished and prosperous agriculturalists on the central plains. His later work on the Republican River valley reaches back to the Early Big Game Hunters of the Pleistocene but waxes warm with the advent of the Central Plains Tradition of village farmers. "On present evidence," Wedel writes, "crop growing as a major or primary subsistence activity seems to have appeared in the central

plains about the time of the Neo-Atlantic climatic episode, which is radiocarbon dated at ca. A.D. 700-1100" (Wedel 1986). He also credits, however, "the extensive use of bison meat" which "offset the nutritional deficiencies of maize." Thus Wedel perceives in what he calls "prehistory" the practice of a diversified food base, combining both crop husbandry and animal resources--exactly what in his own time would be lauded by agriculturalists as the virtues of diversified farming. Wedel also perceives, in the longue durée, the responsiveness of native peoples to the opportunities and constraints of environment. They came and went, prospered and declined, according to changing climatic conditions.

Neither Wedel nor Preston Holder, the scholar who makes the general case for the significance of the village farmers on the plains, ever overcame the tendency to refer to the husbandry of their subjects as "horticulture," a usage that diminishes its gravity--perhaps because the cultivation was done by women. What Holder says of the Caddoan peoples who are his focus in *The Hoe and the Horse on the Plains* applies equally to all the village farming peoples of the the region--the Mandan, Hidatsa, Arikara, Pawnee, Wichita, Omaha, Ponca, Kansa, Osage, and others. "Society stood tied to the earth," he writes. "Corn was its protector. The fields of the river bottoms were its insurance in the face of a difficult environment. The labor of the village and the rewards of life were focused in these fields. The whole was woven into a fabric which continued through time." Holder

observes that the village farmers eventually were swamped by invasive native equestrians and Euro-American farmers. Elizabeth Fenn's work on the Mandan (Fenn 2014) suggests that epidemic disease was more destructive to sedentary peoples than warfare. The village farming way of life was more persistent than the nomadic equestrian.

To juxtapose the two in contrast, however, may be misleading. It also propounds an outdated conception of equestrian bison-hunters as living off the land rather than engaging in labor and husbandry. Recent major studies (West 1998; Hamalainen 2008) of equestrian bison-hunting peoples lay basis for an argument that they were, in fact, pastoral peoples engaged in animal husbandry. The Chevenne and Comanche in the heyday of bison-hunting, from the late seventeenth to the early nineteenth centuries, accumulated and maintained horse herds so large that they placed destructive stress on the riverine corridors of the plains, thereby eroding their own resource base. Moreover, horses and their needs were, as Elliot West says, "complicated." A horse had specific nutritional needs. "On this point a horse's appeal became a hindrance; its hugely increased power came from a vastly greater hunger for energy, a craving Indians had to meet if they hoped to reap the benefits," observes the historian. "An owner had to learn, understand, and respect an animal's complicated needs if his breathing, eating tools were to do what was asked of them." This sounds like a definition of animal husbandry--which is

agriculture, and a sophisticated form thereof, too. No wonder that, as Peter Iverson has described (Iverson 1994), Plains Indians in the reservation period would take readily to handling cattle from horseback. Taking care of herbivores was in their lineage.

In the reservation era the Indian history of both crop and animal husbandry is checkered. Allotment of reservation land both took away the larger part of reservation lands and broke tribal control of remaining lands into individual parcels. On some reservations natives engaged in cattle raising, but agents often were not supportive of this, for they considered animal husbandry insufficiently civilizing. Boarding schools emphasized agriculture for Indian boys, and some individual Indians became proficient farmers, but they were a minority--especially after the 1940s, when the Pick-Sloan Project took most of the best farmlands in the Missouri River valley for dam and reservoir sites. What historian R. Douglas Hurt says of Indian agriculture across the country is certainly true more specifically for the Great Plains: "In the end, white civilization ruined, rather than promoted, Indian agriculture." Interestingly, however, in the twenty-first century the pastoral aspect of Indian agriculture has reasserted itself, as one tribe after another has established a tribal bison herd and used it to feed its people.

Transportation development and military invasion displaced natives on the plains before practitioners of field agriculture were prepared to occupy the ground,

and so there ensued an interlude of what is known in much of the rest of the world as extensive pastoralism, in North America as open-range cattle ranching. This is the chapter in the agricultural history of the Great Plains that has been celebrated in American popular culture, but it is, too, a historical development of consequence. Beneath the popular veneer lies a substructure of substantial primary narratives--Historic Sketches of the Cattle Industry of the West and Southwest (McCoy 1874), Log of a Cowboy (Adams 1903), and Trail Drivers of Texas (Hunter 1920), to begin with. These works all treat of the long drive during the cattle-trailing era from Texas to Kansas and Nebraska railroad towns during the 1860s-1880s. A key primary work that bridges into the next era of the open range, by which longer drives brought herds to occupy the northern plains, is Baron von Richthofen's Cattle Raising on the Plains of North America (Richthofen, 1885), which along with other similar promotional tracts, lured eastern and foreign investment into beef on the open range.

Predictably, in retrospect, about a generation after the passing of the open range, scholarly historians commenced crafting solid and interpretive work on the subject. *The Range Cattle Industry* (Dale 1930), which originated as a study for the United States Department of Agriculture and then became a university press book, was the first great survey of the subject, and its author, a cowboy historian, won the hearts of a generation of students of western Americana. *The Day of the Cattleman*

(Osgood 1929) brings out details of organization and practice on the Wyoming Range, but unfortunately, being based heavily on the records of the Wyoming Stock Growers' Association, is somewhat captured by its archival base--with the result that even as popular culture valorized cowboys as the knights of the range, scholarly literature enthroned big stockmen as monarchs of the cattle kingdom. The Great Plains (Webb 1931), exhibiting the author's fascination with both cowboy and stockman, makes open-range cattle ranching a centerpiece for the intellectual creation of the Great Plains as a cultural region. Webb presents the efflorescence of the range cattle industry as, first, an Anglo-American appropriation of Hispanic cattle culture in Texas; a colonization of the rest of the plains by Texas longhorns and their Texas handlers; and overall, a salubrious adaptation of livestock enterprises to the environment of the Great Plains. The open-range industry, even as it gave way to subsequent developments following the hard winter of 1886-87, nevertheless installed on the prairies a distinctive material culture anchored by adaptations of fencing--barbed wire (McCallum 1965)--and stock watering--windmills (Baker 1985).

Webb and other traditional tellers of the saga of the open range underwent consolidation and correction, making the narrative deeper and more interesting.

The irascible West Texan J. Evetts Haley, although enamoured of the "early days" of ranching on the southern plains, and amplifying the lionization of big operators

with his biography of Charles Goodnight, nevertheless does reveal the transition from open range to fenced pastures and the continued operation of ranching on a great scale following enclosure (Haley 1929; Haley 1936). The legendary Matador outfit also gets a scholarly treatment that navigates its geographic expansion (even into Canada) and also its transition to modern ranching (Pearce 1964). Notably, when Charles Wood essays to chronicle the beef industry in Kansas, he eschews the glory days of the open range and commences in the 1890s with the upbreeding of herds and the "triumph" of Herefords. Likewise, Chapter 1 of John Schlebecker's history of the cattle industry on the plains is entitled, "The Closing of the Range" (Schlebecker 1963). Published in 1963, that work only touches the hem of the garment of great changes, hinting at the transformational impact of biochemistry on cattle finishing at a time when the boom of the Great Plains feedlot industry was yet to come.

When *Gunsmoke* was at the height of its popularity on network television, a boldly revisionist work with a Marxist cast did more to pacify the cattle-town frontier of the central plains than Matt Dillon ever did (Dykstra 1968). Its author determines, first, that there were few fatalities from armed violence in the cattle towns of the 1860s-1880s and argues, second, that the meaningful conflict therein was a class conflict: business interests in the towns used the cattle trade to jump-start their towns, then dismissed the drovers when they wished to pursue

other developments, such as the encouragement of farm settlement. As for the cultural origins of cattle-raising, revisionist works of historical geography called into question its wholly Spanish antecedents (Jordan 1981; Jordan 1993). Terry G. Jordan first establishes that in the South Texas hearth of the industry, Celtic roots out of the Gulf Coast states were also important. He then goes on to survey the dissemination and development of cattle culture throughout western America and finds that eastern influences--including Shorthorn cattle, followed by Herefords and Angus--were equally as salient as Texans and Longhorns. Finally, new scholarship on Wyoming's infamous Johnson County War (Davis 2010) exposes the underhanded tactics and violent character of big-time cattlemen in the very place where Osgood enthroned them historically.

Despite all this work, the scholarship of the cattle industry remained limited and even parochial in two respects: first, in its paucity of attention to environmental relationships and effects, and second, in its lack of scale. Now comes *The Chisholm Trail: Joseph McCoy's Great Gamble* (Sherow 2018), in which James E. Sherow not only brings the lenses of environmental history to bear on the cattle-trailing industry but also expands the scope of investigation to eastern stockyards and packinghouses and overseas consumers. The pastoral aspect of Great Plains agricultural history is revealed as the internationally significant enterprise that it was.

Back on the plains, one aspect of the animal industries remains unrecognized: sheep. The author of the classic primary narrative on the sheep industry of the plains writes, "There is somewhere in the West a cattleman whose wife some years ago went into sheep on her own account and with her own money" (Gilfillan 1929). Her sheep, of course, end up subsidizing her husband's cattle habit. Indeed, during the last decade of the nineteenth century and the first decade of the twentieth, sheep were the expansionist industry on the northern plains. There is dated work on sheep in the West (Wentworth 1948), but little to be read on the Great Plains.

"As Henry stepped out of the door, he noticed a peculiar cloud in the west, too light in color to be rain, or even dust. He called Rosie to the door to look." Henry and Rosie Ise, homesteaders in northern Kansas, as described in the compelling memoir, *Sod and Stubble* (Ise 1936), faced a grave challenge coming from the land itself: "Grasshoppers--millions, billions of them--soon covered the ground in a seething, fluttering mass, their jaws constantly at work." The narrative contains all the standard trials of homesteading, plus a few special ones--and yet Henry and Rosie proved up and raised their family on that claim. Their son John, although busy with his academic career as an economist, took the time to tell their story. For homesteading, indeed the farm settlement experience in general, like

pastoralism, is a defining theme in Great Plains agricultural history, distinguishing it from other agricultural regions.

"Homesteader" is sort of a holy word in the settler society of the plains, given pride of place in every county history and represented in countless local monuments. Scholars, on the other hand, have been dubious about the Homestead Act of 1862 (as well as its various additions and amendments).

Mid-twentieth-century scholars such as Fred A. Shannon and Paul Wallace Gates debunked the reverent mythology of homesteading, arguing that much land on the plains, and most of the better land, was unavailable for homesteading; that homesteaders faced so many disadvantages, most failed to prove up; that the land patent system was rife with fraud; that quarter-section homesteads were impractical in a semiarid region; and that perhaps the whole idea of encouraging family farming there was questionable (Shannon 1945; Gates 1954; Edwards 2019). More recent study, especially that coming from a team of scholars associated with the Center for Great Plains Studies, University of Nebraska, reassesses the question, concluding that success rates were reasonably good. They argue, too, that matters of motive and context are important in reassessment, and they continue to pursue more detailed and localized studies that promise to rehabilitate homesteading in historical memory (Edwards 2019).

Debate about the merits of the Homestead Act does not detract from the more consequential elements of Euro-American agricultural settlement: the transformation of the land, the re-establishment of agricultural production, and the foundation of an agricultural society on the prairies. There were instances and localities, such as the Red River Valley of the North, where the expected mode of family-farm settlement was displaced by another mode entirely. Exploiting the lands granted by the United States government to the Northern Pacific Railway, investors established bonanza farms of five thousand acres and more specializing in raising spring wheat (Drache 1964; Murray 1967). Such farms lasted little more than a decade. Industrialized wheat farming on such scale was quite feasible, but in the longer term, it gave way for two reasons: the drainage issues of the Red River Valley, which made spring seeding difficult, and thus dependence on spring wheat risky; and the desire of investors to sell their lands at profit to arriving family farmers. Thus Hiram M. Drache, the historian well known for his classic history of bonanza farming, The Day of the Bonanza, should also be remembered for its companion work, The Challenge of the Prairie (Drache 1970), which details the experiences of family farmers in the same general region.

What the historians of the Red River Valley and those of the larger Great Plains had in common with one another, as well as with the pioneers whom they chronicled, was a Turnerian sense of progress and, eventually, triumph. Everett Dick, with his "social history" of the "sod-house frontier," provides little information on the sod house as a matter of material culture; rather it is to him a foil, a temporary recourse of settlers gaining their foothold on the way to the establishment of a full-blown farm society with families, schools, barn dances, flour mills--a fully articulated rural society, including progressive notions of social equality and grassroots democracy (Dick 1954). In a subsequent work Dick fills in technical details--we do learn how to build a sod house, fence a claim, fight a prairie fire--but all this is deployed toward "conquering" the "Great American Desert" (Dick 1975).

Gilbert C. Fite, a farm boy from South Dakota (he grew up on his mother's homestead), was a child of the triumphal society profiled by Dick--but he had a clear-eyed retrospective view of his roots. Despite writing for the "Histories of the American Frontier" series, the very name of which connotes Turnerian progress, Fite methodically unpacks the process of settlement. Under the heading of "Destitution on the Frontier," he writes, "Farming has always been a risky, uncertain, and sometimes heart-breaking business, but pioneer settlers on the upper midwest and central prairie frontier were confronted with an unusual series of hardships" (Fite 1966). Nineteenth-century farmers persisted, or not, but in a sense prevailed, "for out of their experiences came a more accurate and realistic view of the region's true nature and a recognition of the type of agriculture that could

succeed there." Thus the region's most evenhanded settlement historian trims expectations.

Included in the catalog of lessons learned were fundamental adjustments attuned to environment. As recounted by the great historian of winter wheat culture on the central plains (Malin 1944), pioneer farmers had to mount a steep learning curve, balancing feed grains and cash grains, laying aside soft white wheats, and embracing hard red winter wheats of Russian derivation. A similar process of adjustment on the northern plains led to cultivation of hard red spring wheats ultimately also of Russian origin, but it was in the north there emerged the other fundamental adjustment, that of tillage. Dry farming--a term that comprised not just farming without irrigation, but also a complex of tillage practices intended to make the most of meager rainfall in a semiarid land--required first a realistic reckoning of the land. Deep plowing, fallowing, and maintenance of a dust mulch through frequent use of spike or disc harrows were intended to husband moisture and raise a crop every other year where moisture would not sustain one every year (Hargreaves 1957). No chronicler of agricultural settlement synthesizes the hopes, failures, triumphs, and adjustments of nineteenth-century pioneers better than Craig Miner, the historian of western Kansas (Miner 1986). Learning to navigate agriculture "as a commercial enterprise and at the same time as a way of life,"

Miner says farmers learned "the dynamics of total human experience." Miner thus is a more poetic echo of Fite.

The traditional historical conception of the frontier as a nineteenth-century affair resulted in a longstanding neglect by scholars of continuing agricultural settlement in the twentieth century, a shortcoming best remedied by the historian of West River South Dakota, Paula M. Nelson (Nelson 1986). Her account of agricultural settlement west of the Missouri River, with its initial efflorescence followed by disillusionment, resonates with (and even directly quotes) the traditional ballad of prairie settlers, "Dakota Land" (also known as "Kansas Land," "Nebraska Land," and other variants), alternating stanzas lauding a "land of corn and wheat" with stanzas damning a "land of drouth and heat."

Thus from the settlement experience the denizens of the plains (and their historians) carry a historical mixed memory. They took up the land with high hopes of fulfilling the grand promises of land promoters (Blodgett 1988). Those promises never quite went away; as David M. Wrobel has shown, they formed a residual base for memory and identity (Wrobel 2002). They survived in tension with experiences of severe historical trauma--deadly prairies fires, destructive plagues of Rocky Mountain locusts (Courtwright 2011; Atkins 1984; Lockwood 2004). Such layered experiences, combined with day-to-day learning and adjustment,

brought them to the page on which historians such as Fite, Miner, and Nelson have situated them.

The commodity cultures of the Great Plains, many and diverse, generally have not attracted historical attention matching that of the cattle culture. The cotton industry so important to the southern plains is a relatively recent relocation. At the other end of the plains, an oral history of the sugarbeet industry in the Red River Valley of the North (Shoptaugh 1997) shows the rich potential for work focused on a commodity and its producers. The only commodity culture to receive sustained attention, however, is that of wheat, beginning with the masterly work of Malin (Malin 1944). Winter Wheat in the Golden Belt of Kansas is the keystone of a massive and sustained inquiry by this irascible scholar into the emergence of communities of production, work which, although clearly derivative from the sort of environmental determinism broadly sketched by Webb, reckons with complexity in admirable fashion. Malin, first, grounds his work in place--the vernacular region of the central plains known as the Golden Belt for its grain production. Second, he makes its "point of approach" the "community or neighborhood," thus recognizing that in the nineteenth century, agricultural development and dissemination was a neighborly process. At the same time, the work has international reach; in particular, Malin assembles the threads by which German-Russian Mennonites established the culture of hard red winter wheats from Russia on the plains (Moon

2020). His attention to this crucial introduction also exemplifies his critical posture, for Malin challenges Mennonite folk mythology as to Turkey wheat even while validating its importance. Throughout, Malin's work is granular, inductive, piecing together amazing amounts of data. Perhaps most important, Malin portrays his farmers as learning communities with agency, people on the land assessing circumstances, making decisions, taking actions--shifting their crops and varieties, inventing technologies to solve problems, all the while talking among themselves about what they are doing.

The next exemplary historian of wheat culture, Craig Miner, takes up the same tools and applies them more artfully (Miner 1986; Miner 1998; Miner 2006). Region--western Kansas--is the focus of this work, from which wheat culture emerges as the agricultural mainstay. Although a business historian in no way antagonistic to big capital, Miner remains a man from Ness City who, like Malin, takes the neighbors seriously. Whereas some scholars may decline to inquire too closely as to the thoughts and daily doings of farmers producing what is quintessentially a cash crop, Miner dwells with them, absorbing the grasshopper plagues and dust storms as chastening experiences, but in the end confirming wheat as the crop for the generations, "as a commercial enterprise and at the same time as a way of life." Notably, he writes the intertwined biographies of grain magnate Ray Garvey and ambitious farmer John Kriss, hardheaded businessmen if

there ever were such, as vehicles to illustrate the "dual nature" of farming as a business and as a way of life. "John Kriss," he concludes, "represented that impossible mix about as well as an actual person could."

Two works on the culture of wheat harvesting extend the concept of a commodity culture on the plains to its logical limits. Bull Threshers and Bindlestiffs (Isern 1990) deals with the vainglorious era of steam-powered threshing in a way that delineates the economic and social systems by which work was accomplished (the organization of custom threshing and threshing rings, the recruitment of harvest labor, adoption of new technologies of mechanization) while at the same time also zooming in on folk practices (how to build a shock of grain, how to manage a cook car, what the whistle-signals blown by a steam traction engineer meant to the people in the field). Both the systems and the folkways of wheat culture here described loom large because they crested during the so-called Golden Age of American Agriculture. Another work (Isern 1981) takes up the story of wheat harvesting with the advent of itinerant custom harvesting during the World War II era. The author emphasizes the regional suitability of custom harvesting, whereby agricultural contractors (themselves farmers) package and transport the capital and labor requirements of harvest for farmers, as well as the role of custom harvesting as a connecting link of agricultural operations up and down the plains, Texas to Saskatchewan. He also, however, develops the

self-consciousness and community--the mentalité, one might say--among the custom cutters, a tight subculture.

The history of agricultural research and technology on the Great Plains suffers in the telling from the limitations of regionalism. Knowledge systems are either federal (governmental operations comprising national and state entities) or global (economic operations that transgress boundaries). For instance, the work of historian Alan I. Marcus on the origins of experiment stations as organs of agricultural colleges under the Hatch Act of 1887 (Marcus 1985), a work of national scope, establishes a template for thinking about public research on agriculture. Interpretation of the subject highlights tension between farmers, even scientific farmers, and agricultural scientists, over the research agenda. There was a growing sense that to improve an agriculture that was elevating in expectations and practice, scientists might have to loosen their ties to farmers at the grassroots and elevate the profession of agricultural science. The scientists prevailed; experiment stations became "part of the new network for creating and disseminating agricultural information"--a network embracing rationalization, systematization, and standardization. Agricultural science became less about solving farmers' problems and more about transforming farmers' practices--and lives.

Good histories at the state level on the plains pick up on this tension. A history of the agricultural arms of Oklahoma State University (Green 1990)

discloses programs and personnel embedded in the interests and culture of farmers through the early decades of the twentieth century, then becoming increasingly institutionalized. A history of the North Dakota Agricultural Experiment Station (Danbom 1990), while arguing, "The value system of the scientists has changed little, if at all," nevertheless recounts notable episodes of farmer-station conflict over communications and research and then labels the post-World War II era a "Golden Age" for the station. This was the very time when escalations in federal funding inevitably shifted priorities in the direction of national imperatives. Left unanswered by studies of national and state dynamics is the question, What was the regional dynamic? Similarly, studies of agricultural mechanization such as the history of the farm tractor by Robert C. Williams (Williams 1987) explicate the subject from a national perspective--but surely, in a region as ready to embrace mechanization as was the Great Plains, there must also be a distinctively regional story to tell, too. David Vail proves that region can provide the structure for a study in the history of technology with his work on agricultural chemicals and aerial spraying; he even devises a new name for the region, *Chemical Lands* (Vail 2018).

Regional developments in technology commonly emerge parcel to other regional stories, such as the harvesting of small grains, or the provision of water in a semiarid region. Thus, picking up where the work of Erwin Hinkley Barbour left off a century earlier (Barbour 1899), T. Lindsay Baker offers a compendium of

windmill models and technology pertinent to both livestock operations and crop irrigation on the plains (Baker 1985). Historians of irrigation (Sherow 1990; Green 1973; Opie 1993) inevitably bore deep into technology, whether it be the hydraulics of water diversion for surface irrigation or the logistics of pumping from underground aguifers. The same scholars reckon with environmental possibilities and consequences; surely the turbine pump and the center pivot have a lot to answer for--or perhaps it is those who deploy them heedlessly who must answer. John Opie declares (in 1992), "For more than three decades the plains irrigator has been persuaded to plow his fields and water his plants fencerow to fencerow to keep domestic prices low and feed the world. . . . Difficult choices . . . cannot be postponed forever." Perhaps, then, it is best that Great Plains historians tend to serve up technological and environmental histories in parcels wrapped up along with recognition of human agency. Surprisingly, technological deployments on the plains in the twenty-first century to date have made petroleum available in seemingly unlimited quantities, while no solution for the finite nature of the Ogallala Aquifer is in sight. At risk is not only the entire regional agricultural complex of irrigation, feed grains, petrochemicals, feedlots, packinghouses, immigrant labor, and urban development but also the very natural systems of the plains. These issues want the application of holistic historians.

The more intractable problems of regional agriculture have generated multiple political movements centered in the farmers of the plains. There are several ways of explaining this. Early historians of the National Grange of the Patrons of Husbandry and of the Farmers Alliance and People's Party attributed the Granger and Populist movements of the plains to frontier deprivation and post-frontier disillusionment. They explained radicalism, or even unusual cooperation, by stretching the Turnerian blanket far enough to cover it. As the conception of the Great Plains evolved from one of frontier to one of region (Kraenzel 1955), regional disadvantage--sparseness of population and resources, remoteness, dependency, resentment of the metropolis--seemed a more generally applicable explanation. At the same time some scholars looked inside the farm movements, attempting to devine their natures and rely less on external determinants.

Thus in Solon Justus Buck's pioneering history of the Grange (Buck 1913), he locates the "center of agricultural discontent" in the "great prairie states," where farmers "were from the first handicapped by the notion that they were to make their fortunes by raising wheat, and for a long time were unable to grasp the fact that conditions of soil, climate, and market facilities demanded a change." Later, more definitive work on the Grange (Nordin 1974) does not so much reject the

diagnosis of prairie discontent as distinguish the Granger movement, a political reaction to hard times, from the Grange as a fraternal order.

The issues of the Grangers in the 1870s became the issues of the Farmers Alliance in the 1880s and of its political offspring, the People's Party, in the 1890s. What caused sturdy farmers to rise up and demand regulation of grain elevators, regulation and even nationalization of railroads, public sources of credit to ease mortgage debt, inflation of the currency, and the other items on what seemed a radical agenda? Again, Populism's pioneering historian (Hicks 1931) insists the explanation lies in the demise of the frontier: "it was only as the West wore out and cheap lands were no longer abundant that well-developed agrarian movements began to appear." Chapter 1 of The Populist Revolt is "The Frontier Background."

As reconsiderations of the Populist movement unfolded, the hottest controversy in the historiography of Great Plains agriculture precipitated.

Post-World War II scholars such as Richard Hofstadter (Hofstadter 1955) became suspicious of the motives of rural populist movements in general and the Populist movement in particular, considering it regressive, reactionary, and bigoted--not at all the progressive cause it had been made out to be. Its leaders were as incompetent as its constituents were misguided. The paladins of populism answered. In a defensive work that nevertheless has stood the test of time (Nugent 1963), Walter Nugent decries the straw man of the "Populist as Monster" and

methodically reiterates the constructive relationships between Populists and immigrants, while denying the movement was seriously stained by anti-Semitism. Norman Pollack assertively doubles down on the progressive nature of the "grass-roots world of Populism" in *The Populist Response to Industrial America* (Pollack 1962): response was not reaction, after all, and "Populism formulated an extraordinarily penetrating critique of industrial society." Over time other thoughtful interpreters joined Lawrence Goodwyn in describing and analyzing the "movement culture" of the Populists. This line of analysis actually dovetails well with Hicks's descriptions of Populist parades, picnics, and glee clubs singing "The Farmer Is the Man." Populism seems well and truly rehabilitated--except that anyone who studies the exuberant anthems of the Populist singing clubs will be troubled by their frequent pejorative allusions to Jewish financiers.

Populism may have sucked much of the oxygen from the study of agrarian radicalism on the plains, but recent years have seen a resurgence of interest in the other early agricultural revolt of the prairies, the Nonpartisan League, founded in 1915. For more than a half-century *Political Prairie Fire* (Morlan 1955) stood as the standard reference on this North Dakota-centered organization that co-opted the Republican Party to assail big business and defend the family farm. Notably, the Leaguers, although not stridently collectivist, embraced targeted elements of state socialism. Their forward-looking farm credit programs did not last, but the state

bank and the state mill and elevator they established still thrive. Terry Shoptaugh offers a critical review of the leadership exercised by Arthur Townley and the rest of what he calls the League's "sons of the wild jackass," while Michael J. Lansing, after essentially doing for the Nonpartisan League what Goodwyn did for the Populists, detailing their progressive culture, goes farther: he commends their example for America in the twenty-first century. With this broadening of significance, we are not (just) in Kansas (or North Dakota) any more.

A continuing deficiency in the historical literature of agriculture on the Great Plains is lack of attention to gendered elements of agricultural life. Webb set a poor example with *The Great Plains*, paying not even lip service to women's vital roles in agricultural life (or any other aspect of life) on the plains. A half-century later Glenda Riley addressed the deficiency with *The Female Frontier* (Riley 1988), arguing for the continuity of women's lives in the move west to the plains on account of the constraints of separate spheres. Women's lives, confined, presumably, to domestic matters, did not undergo the transformational interaction with the physical environment that defined regional life. Since then feminist historians have questioned this somewhat wooden assumption, but it was important to break the silence.

An outstanding contribution to the explication of gender roles on prairie farms are the works of Paula Nelson on West River South Dakota (Nelson 1988;

Nelson 1996). Gender is not the central subject of these books, but it is addressed in due course in grounded and perceptive fashion. The detailing of life routines for Carrie Miller in Butte County establishes her roles on the homestead not according to what she could not do but according to what she did--"Carrie Miller was never idle," writes Nelson. "She managed all the indoor labor. . . . Her tasks went beyond the door of the soddy to the garden and the barn, and even to the field when she wished." Moreover, Nelson's research gives the lie to the determinisms of both Webb and Riley: environment mattered, and women changed rules, due "both to their roles as producers and to the region of the country where they lived." They raised children differently, they navigated changing societal norms, and they secured better education for their children's future. Speaking of children on the farm, the excellent work of Pamela Riney-Kehrberg (Riney-Kehrberg 2005) on rural childhood is regarded as standard, but in an essay on Great Plains agriculture, it should be noted that *Childhood on the Farm* blurs the midwest and the plains, which might not matter to Riley, but it does to Nelson.

Other histories give a sharper edge to considerations of gender and to the idea of the family farm. Clearly, the rise of mammoth farming corporations such as the Campbell Farming Corporation in Montana (Fitzgerald 2003), which far eclipsed the fondest dreams of old-time bonanza farmers, created no such space for the definition of women's roles as Nelson describes. Moreover, where family

farming once flourished, women found, as the twentieth century advanced, that their possibilities and prerogatives were undercut by mechanization (which had been sold as a liberating influence) and by the social expectations and cultural pressures brought to bear by business models and agricultural education (Jellison 1993; Neth 1995). Even home extension work, welcomed by farm women for its social and educational opportunities, proved erosive of women's roles and standing. Finally, there is the ethnic factor to consider. Vast tracts of the prairie landscape constituted what an assiduous scholar of immigrant farm settlements has termed a "prairie mosaic," peopled almost entirely by farmers who spoke English as a second language if at all (Sherman 1983). Generalizations about gender roles do not necessarily hold.

It is worth mentioning that every work cited in the preceding passages treating women and gender roles in Great Plains agriculture was authored by a female scholar--a good indication as to from what quarter the remedy to historiographic deficiencies in this subject area may be expected.

In 1935 Paul B. Sears wrote *Deserts on the March*, an instant classic of American conservation (Sears 1934), and Woody Guthrie wrote "Dust Bowl Disaster," a powerful ballad of the great dust storm of April 14, 1935. Sears says, "The face of earth is a graveyard, and so it has always been." Guthrie says, "We thought it was our judgment, we thought it was our doom." Neither commentator

conveys much of the triumphalism that marked the earliest historical writing about agriculture on the Great Plains.

Nor do our historians of the Dust Bowl of the 1930s. The most evenhanded of them is R. Douglas Hurt (Hurt 1981). The work is dispassionate, detailing the circumstances and repercussions of this environmental catastrophe, but it eschews the blame game: Hurt catalogs contributing factors in the simple multiple-causation fashion of a working historian. On Hurt's right hand sits the work of Paul Bonnifield, whose treatise on the Dust Bowl (Bonnifield 1979), written from the spindly grassroots of the Oklahoma Panhandle, minimizes the contributions of the federal government to disaster relief and valorizes the common folk who hunkered down and persevered. On Hurt's left hand sits the work of Donald Worster, whose Bancroft Prize-winning history (Worster 1979) betrays no hesitation in laying blame: capitalism was the cause, and farmers were accomplices. The Dust Bowl was an unforced error.

Popular belief commonly traces the economic and demographic decline of the Great Plains to the Dust Bowl; Steinbeck's *Grapes of Wrath* compounds the confusion. That the shuttering of communities and the out-migration of youth were largely phenomena of the post-World War II era, reaching a nadir during the 1980s, does not gainsay the public impression that things have gone downhill for a long time, and the Dust Bowl looms as the memory trigger. This sense of long-term

decline is what Geoff Cunfer recogonizes as the "declensionist narrative" of Great Plains history.

In On the Great Plains (Cunfer 2005), a startling work of reinterpretation, Confer takes blame off the table by questioning all the given explanations of the Dust Bowl. His thorough examination of county-level data reveals that the great plow-up was less thoroughgoing than was thought; most of the Great Plains remains grassland. Contrary to popular tropes of instability in a harsh environment, Cunfer charts the long-term stability of land use across the region--with wheat as "the quintessential cash crop of the plains." All this is set-up for Confer to reconsider a question Malin had posed a half-century earlier: "What natural and human factors contributed to the dust storms of the 1930s?" In answer, he suggests that rather than lay all grief to "human ecological failure," historians should accept the fact that dust storms "are normal forms of ecological disturbance" during extended drought. Cunfer never says husbandry and conservation do not matter--but he moves the baseline for explanation. The Dust Bowl may not have been the pivotal event in Great Plains agriculture history. The Great Plains may not be in the permanent grip of a declensionist narrative.

In the year of the nation's bicentennial, the Agricultural History Society met at Montana State University for a symposium: "Agriculture in the Great Plains, 1876-1936." In his remarks, the program organizer and editor of published

proceedings (Wessel 1977) dwells upon the harshness of the Great Plains environment: the imperative of adaptation to "an environment unlike anything previously encountered" with a lack of water that was "discouraging and depressing;" the struggle of pastoralists and settlers who "fought the elements more intensely than they fought each other; and the "uncertainty of life on the plains." In closing remarks Gilbert C. Fite, the most respected agricultural historian in the land, speaks of a history of farmers "in a life and death struggle with the natural environment." He warns that the chronic precariousness of agricultural enterprise is now aggravated by higher production and living costs. The outlook is sobering. It sounds like the end of agricultural history on the Great Plains.

A review of the region's agricultural history and the efforts of its historians reminds us that the distilled wisdom of 1976, assumed to be conclusive, was in fact only another snapshot in the long and continuing arc of agriculture on the Great Plains.

Bibliographic Essay

The foregoing chapter may be considered historiographic, but more essentially, it is epistemological. It undertakes to explain how our understanding of agriculture on the Great Plains took shape in the way that it has. This bibliographic essay makes more explicit the building blocks composing the intellectual construction. Note: for additional factual background on aspects of the history of

Great Plains agriculture, see applicable sections of David J. Wishart, Ed., Encyclopedia of the Great Plains (Lincoln: University of Nebraska Press, 2004).

Primary Narratives

Classic primary narratives are used in this chapter to impart a flavor of early agricultural experience. For example, the recollections of the Hidatsa woman Maxidiwiac, Buffalo Bird Woman, are without parallel as to sustained narrative description of Indian agriculture (Wilson, 1917, 1987). Open-range cattle ranching is rich in good narratives, because the subject had a public. The cattle-buyer Joseph G. McCoy writes frankly of the commercial origins of the long drive (1874); Andy Adams situates the narrative on the trail north (1903); while Baron von Richthofen exposes the speculative boom that financed the range cattle industry. Marvin J. Hunter's compenious compilation of cattle-trailing narratives (1920) evidences the iconographic appeal of the open range. Homesteading memoirs such as that of John Ise, on the other hand, are more muted, even tragic—although *Sod and Stubble* (1936) limns a quietly heroic female figure: his mother, Rosie Ise.

Predictably, in retrospect, academic historians come to the fore about a generation after the homesteading era. The lions of this emergence are Ernest Staples Osgood with his focused study of the range cattle industry, *The Day of the Cattleman* (1929); Edward Everett Dale with his more general treatment of the cattle business, *The Range Cattle Industry* (1929); Walter Prescott Webb with his

inoculation of environmental determinism, *The Great Plains* (1931); and John D. Hicks with his history of agrarian activism, *The Populist Revolt* (1931) (an early forerunner of which is Solon Justus Buck on *The Granger Movement* 1913). All these first-generation academic treatments not only are genesis works in their respective subjects but also document the deeply Turnerian bent of both agricultural history and Great Plains history at mid-twentieth century.

Although the historiographic edifice built on these foundations is fairly sketched in the foregoing chapter, it is worthwhile here to note some outstanding signposts in the line of inquiry into agriculture on the plains.

On the region's first farmers, Preston Holder's *The Hoe and the Horse on the Plains* (1970) holds up well in its delineation of the two great subsistence traditions of American Indians on the plains. Beyond that, focused secondary work is slim; readers may consult R. Douglas Hurt's *Indian Agriculture in America* (1987) for regional content.

The history of the range cattle industry was shaken by Robert R. Dykstra's revisionist bolt, *The Cattle Towns* (1968), but in the long run, two works by historical geographer Terry G. Jordan do more to deepen our understanding of the business: *Trails to Texas* (1981) and *North American Cattle Ranching Frontiers* (1993). It falls to James E. Sherow in *The Chisholm Trail* (2018) to remind us there is still pathbreaking work to do along this trail.

On homesteading and settlement, Gilbert C. Fite's *The Farmer's Frontier* (1966) is another work that holds up well as a general survey. Skipping forward to the most current work on the subject, the research in progress on homesteading coming from Richard Edwards's team at the University of Nebraska, of which Homesteading the Plains is first fruit (Edwards, 2017), is an exciting revision of our knowledge of settlement. The best focused lines of work on a particular subregion of the Great Plains (all of which focus on wheat) are those of James C. Malin on the Golden Belt of Kansas (1944); Hiram Drache on the Red River Valley of the North (1964, 1970); and Craig Miner on western Kansas (1986, 1998, 2006). David Moon, *The American Steppes* (2020), details the Russian contributions to Great Plains development in fascinating fashion. For an efflorescence in the commodity culture of wheat, see the two books by Thomas D. Isern on wheat harvesting (1981, 1990).

The history of agricultural research and technology has had difficulty breaking free of the land-grant establishment and generating fearless interpretation specific to the region, but there is thoughtful work around the subjects of water and irrigation, beginning with Donald E. Green's *Land of the Underground Rain* (1973). James Earl Sherow's *Watering the Valley* (1990) focuses on the Arkansas River Valley, while John Opie's *Ogallala* (1993) treats the deteriorating situation of the High Plains region underlain by the Ogallala Aquifer. David Vail's *Chemical*

Lands (2018) is a disturbing work talking about the elephant in the room of prairie farming since the Second World War: chemical agriculture.

"Chestnut" being an ill-fitting metaphor for the plains, we may say the history of agrarian politics since Buck and Hicks has been the prairie turnip of regional agricultural history. Around the subjects of the Farmers' Alliance and the People's Party, and downstream from Richard Hofstadter's *The Age of Reform* (1955), taking Hofstadter to task have been a score or more historians, including ones mentioned in the chapter here: Walter T. K. Nugent (1963, 2d Ed, 2013), Norman Pollack (1962), and Lawrence Goodwyn (1976). The last of these, by going beyond the defense of Populism to explicate its "movement culture," seems most salient. On the Nonpartisan League, the old standard by Robert L. Morlan, *Political Prairie Fire* (1955), remains valuable, but it is substantially supplanted by the more sophisticated analysis offered by Michael J. Lansing in *Insurgent Democracy* (2015).

Glenda Riley's *The Female Frontier* (1989) liberates regional scholarship on gender, farm women, and families from the stays of Webb's environmental determinism, only to subject it to the doctrine of separate spheres. Thankfully, a cohort of feminist scholars has enlarged both the historical sphere of women's lives on the plains and our scholarly understanding of them. Outstanding among these are Katherine Jellison, in *Entitled to Power* (1993), whose subjects engage

technology beyond the shelterbelts; Mary Neth, in *Preserving the Family Farm* (1995), who exposes the ambivalence of liberating technologies that actually diminished women's status; and Deborah Fitzgerald, whose *Every Farm a Factory* (2003) traces the imperilment of the very ideal of the family farm by modernizing technologies and values. For a genuine sense of gender roles on farms in one quarter of the plains, no one surpasses Paula M. Nelson in her two books on West River South Dakota: *After the West Was Won* (1986) and *The Prairie Winnows Out Its Own* (1986).

Another nexus of engaging scholarship is the Dust Bowl and attendant issues of land use, social viability, and soil conservation. Around 1980 emerged three quite different histories of the Dust Bowl: the most acclaimed work, Don Worster's *Dust Bowl* (1979), which chalks up the environmental catastrophe to capitalist excess and situates farmers as its dupes; Paul Bonnifield's *The Dust Bowl* (1979), which valorizes those Dust Bowl denizens who persisted at the eroding grassroots of the region; and R. Douglas Hurt's *The Dust Bowl* (1981), which provides a sober, multi-causal analysis of the phenomenon. Fast-forward a quarter-century and Geoff Cunfer, *On the Great Plains* (2005), calls all previous analyses into question by documenting the persistence of grassland in the Great Plains landscape, arguing for the historic stability of Great Plains agriculture, and

questioning assumptions of human agency lurking behind the black clouds of the 1930s.

Despite the importance of agriculture to the Great Plains and their historical narrative, there is no overall, synthetic consolidation of historical scholarship on regional agriculture to serve as platform for a new generation of scholarship.