

Settlement

Mennonite migrants expressed differing views on their prospects when they arrived in the Great Plains from their previous homes in the steppes of the Russian Empire. High winds raising dust storms in Kansas in 1874 prompted one to say that he was “afraid of the future and whether we would make our living here,”¹ despite, or perhaps because of, the fact that such storms were familiar from the steppes. Another new arrival had no such worries. He told Noble Prentis, a journalist from the *Topeka Commonwealth*, that in three years they would transform the “ocean of grass” of the prairies “into an ocean of waving fields of grain, just as we left our Molotschna [in the steppes].” Prentis predicted that Kansas would be “to America what the country of the Black Sea and Sea of Azov is now to Europe – her wheat field.”²

Mennonites from the steppes were just one group among many Euro-American agricultural settlers in the Great Plains. Over the last four decades of the nineteenth century, due largely to hundreds of thousands of settlers, the population of the central and northern plains grew from around a hundred and forty thousand in 1860 to over three and a quarter million in 1900 (see Table 1.1).³ The rates of increase in individual states are truly striking. The population of Kansas grew by 174 percent in the 1870s and a further 43 percent in the 1880s. Nebraska saw population increases of 267 and 135 percent in the same two decades. In the 1880s, the numbers of inhabitants of South and North Dakota respectively

¹ Cornelius Krahn, *From the Steppes to the Prairies, 1874–1949* (Newton, KS: Mennonite Publishing Office, 1949), p. 100.

² Noble L. Prentis, “The Mennonites in Kansas,” *The Commonwealth*, October 15, 1874, reprinted in Krahn, *From the Steppes*, pp. 13–14.

³ U.S. Census Bureau, “Census of Population and Housing,” available online at www.census.gov/prod/www/decennial.html, accessed May 17, 2018. Data for Kansas, Nebraska, South and North Dakota. Few Native Americans were counted in censuses before 1900. U.S. Census Bureau, Censuses of American Indians, available online at www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html, accessed May 17, 2018.

Table 1.1 *Population Increase in the central and northern Great Plains, 1860–1900*

	1860	1900
Kansas	107,206	1,470,495
Nebraska	28,841	1,066,300
Dakota Territory	4,837	
South Dakota		401,570
North Dakota		319,146
Total	140,884	3,257,511

Source: U.S. Census Bureau “Census of Population and Housing”

mushroomed by 256 and 416 percent.⁴ The incoming settlers were ethnically diverse, including: white Americans from further east; African-Americans from the south; Hispanics from Mexico, New Mexico, and Texas; French Canadians from the north; and immigrants from Europe, especially Germany, Scandinavia, the Czech lands of the Austro-Hungarian Empire, Britain and Ireland, as well as Germanic peoples, including Mennonites, from the Russian Empire.⁵ By their sheer numbers and labor, Euro-American settlers transformed the plains that had been inhabited by smaller populations of Native Americans with their own ways of life into an agricultural region that became a breadbasket for the United States and others parts of the world.⁶

The Euro-American settlement of the Great Plains and development of an agricultural economy were consequences of deliberate policies pursued by the U.S. federal government. The Kansas–Nebraska Act of 1854 established two territories on land it had previously assigned to Native Americans and opened them to outside settlers. In 1860–1, taking advantage of the secession of the southern states, the Republican-dominated Congress advanced

⁴ David B. Danbom, *Sod Busting: How Families Made Farms on the Nineteenth-Century Plains* (Baltimore: Johns Hopkins University Press, 2014), p. 65.

⁵ See Bruce A. Glasrud and Charles A. Braithwaite, eds., *African Americans on the Great Plains: An Anthology* (Lincoln: University of Nebraska Press, 2009); Karen Hansen, *Encounter on the Great Plains: Scandinavian Settlers and the Dispossession of Dakota Indians, 1890–1930* (New York: Oxford University Press, 2013); Terrence W. Haverluk, “The Changing Geography of U.S. Hispanics, 1850–1990,” *Journal of Geography* 96 (1997), 134–45; Frederick C. Luebke, “Ethnic Group Settlement on the Great Plains,” *WHQ* 8 (1977), 405–30; D. Aidan McQuillan, *Prevailing Over Time: Ethnic Adjustment on the Kansas Prairies, 1875–1925* (Lincoln: University of Nebraska Press, 1990); William C. Sherman, *Prairie Mosaic: An Ethnic Atlas of Rural North Dakota*, 2nd edition (Fargo: North Dakota State University Press, 2017).

⁶ On the development of agriculture in the Great Plains, see Geoff Cunfer, *On the Great Plains: Agriculture and Environment* (College Station: Texas A&M University Press, 2005).

the free settlement of the plains. Kansas was admitted to the Union as a free state in 1861. The Dakota Territory was organized in the same year. It comprised the future states of North and South Dakota and, for a time, much of the future Wyoming and Montana. The federal government enacted laws to make land and transport available for settlers. The Homestead Act of May 1862 authorized settlers, both U.S. citizens and foreign immigrants intending to become citizens, to claim up to 160 acres of “public land” and, after fulfilling certain conditions, paying fees, and waiting five years, to receive title to the land. Also in 1862, Congress enacted the first of several Railroad Acts. They granted public land and loans to companies to build lines across the plains and on to the Pacific coast. The First Transcontinental Railroad, which went through Nebraska, was built between 1863 and 1869. The Atchison, Topeka and Santa Fe Railroad started in Chicago and reached the western border of Kansas in 1873. In time, railroads connected the plains states with the rest of the country. Railroads promoted the agricultural settlement of the plains in three ways. The companies sold the land they had been granted to settlers to cover their costs. The railroads provided transport for settlers to reach the plains. And, once the settlers had crops and livestock for sale, the railroads carried their produce to domestic markets and ports for export.⁷

The U.S. government made expert advice available to support the development of agriculture in the plains and other states. Again in May 1862, the U.S. Department of Agriculture (USDA) was established:

to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture, rural development, aquaculture, and human nutrition, in the most general and comprehensive sense of those terms, and to procure, propagate, and distribute among the people new and valuable seeds and plants.⁸

In July 1862, the Morrill Land Grant College Act further supported agriculture by donating public lands to endow “Colleges for the Benefit of Agriculture and the Mechanic Arts.”⁹ A decade and a half later, in 1877,

⁷ For a concise summary, see Danbom, *Sod Busting*, pp. 7–9. The role of the federal government in the American West has received much attention. See for example, Karen R. Merrill, “In Search of the ‘Federal Presence’ in the American West,” *WHQ* 30 (1999), 449–73. See also Richard Edwards, “The New Learning about Homesteading,” *GPQ* 38 (2018), 1–23; Richard White, *Railroaded: The Transcontinentals and the Making of Modern America* (New York: Norton, 2011).

⁸ “An Act to Establish a Department of Agriculture,” May 15, 1862, available online at www.nal.usda.gov/act-establish-department-agriculture, accessed May 15, 2018.

⁹ “Morrill Land Grant College Act,” July 2, 1862, available online at www.nal.usda.gov/morrill-land-grant-college-act, accessed May 15, 2018.

the Hatch Act provided funds to found agricultural experiment stations attached to the land grant colleges. The stations conducted research and experiments to promote the “agricultural industry,” “having due regard to the varying conditions and needs of the respective states and territories.”¹⁰

The settlement of the plains by Euro-Americans and development of agriculture were achieved at the expense of the indigenous population. From the 1860s to the 1890s, the federal government deployed the U.S. Army to fight a succession of wars and military actions against the Plains Indians. By the end of the century, the army and the tide of settlers had driven Native Americans off much of their lands and into reservations or exile, in the process opening up more land for settlement by outsiders.¹¹ Prior to conquest, the indigenous population had led ways of life that were both settled and mobile. Different peoples had supported themselves in a variety of ways that included growing corn, beans, and squash among other crops in bottom land along rivers, gathering wild food, hunting fur-bearing animals and trading their pelts, and hunting bison in the high plains. Hunting bison from horseback was a relatively recent development. Indigenous peoples began to acquire horses in the sixteenth century from those brought over by Europeans. They acquired firearms from the same source. The Great Plains region before Euro-American conquest and settlement was a dynamic world in which indigenous groups moved around, allying with or defeating other peoples. The Apache, Cheyenne, Comanche, and Sioux peoples moved to the plains from outside after they obtained horses and defeated horticultural peoples, such as the Mandan, Hidatsa, and Arikara, of the river bottoms. Over the eighteenth and first half of the nineteenth century, the Sioux conquered much of the northern plains, until they and their allies were overpowered by the U.S. Army.¹²

¹⁰ A. C. True and V. A. Clark, “The Agricultural Experiment Stations in the United States,” *USDA Office of Experiment Stations Bulletin*, no. 80 (1900), 36–7. See also Jeremy Vetter, *Field Life: Science in the American West during the Railroad Era* (Pittsburgh: University of Pittsburgh Press, 2016), pp. 267–330.

¹¹ For a recent interpretation and analysis, see Gary Clayton Anderson, *Ethnic Cleansing and the Indian: The Crime That Should Haunt America* (Norman: University of Oklahoma Press, 2014), pp. 237–337. For a Native American perspective, see David C. Posthumus, “A Lakota View of Pté Oyáte (Buffalo Nation),” in *Bison and People on the North American Great Plains: A Deep Environmental History*, eds. Geoff Cunfer and Bill Waiser (College Station: Texas A&M University Press, 2016), pp. 278–309.

¹² See Loretta Fowler, “The Great Plains from the Arrival of the Horse to 1885,” in *The Cambridge History of the Native Peoples of the Americas*, vol. 1, *North America*, eds. Bruce G. Trigger and E. Washburn Wilcomb, Part 2 (Cambridge: Cambridge University Press, 1996), pp. 1–56; Pekka Hämäläinen, “The Rise and Fall of Plains Indian Horse Cultures,” *JAH* 90 (2003), 833–62; Richard White, “The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries,” *JAH* 65 (1978), 319–43.

In recent discussions over how to characterize the actions against Native Americans in the western United States, some scholars have made explicit comparisons with more recent European history, including the Third Reich under Hitler. They have debated the applicability of such terms as “holocaust,” “genocide,” and “ethnic cleansing.”¹³ They have pointed to similarities between the military conquest and agricultural settlement of the American West in the nineteenth century and analogous plans for lands to the east of Germany in the twentieth century. From the early 1920s, Hitler and the Nazi party advocated, and during the Second World War pursued by military means, the acquisition of *Lebensraum* (living space) in eastern Europe. The aim was to settle new German agriculturalists in lands to the east from which much of the population, mostly Slavic and Jewish peoples, had been removed. The lands the Nazis designated for German settlement included the fertile steppes of Ukraine. They intended southern Ukraine and the Crimean peninsula to become largely German farming colonies. When the *Wehrmacht* invaded and occupied Ukraine in 1941–3, they found some of the earlier Germanic settlers, including Mennonites, still there, although others had been deported by the Soviet authorities before and after the outbreak of the war. The occupying forces augmented the surviving Germanic settlements in Ukraine with more “ethnic Germans” (*Volksdeutsche*).¹⁴ Historians of Mennonites are now coming to terms with the troubled history of Mennonite communities under German occupation, where some of their members were victims, but others participated in the Nazi’s plans, including the Holocaust.¹⁵

¹³ For recent work on this complex subject, see Gary Clayton Anderson, “The Native Peoples of the American West: Genocide or Ethnic Cleansing?” *WHQ* 47 (2016), 407–34, and the response that follows it; Edward B. Westermann, *Hitler’s Ostkrieg and the Indian Wars: Comparing Genocide and Conquest* (Norman: University of Oklahoma Press, 2016). On “ethnocide” in the Canadian prairies, see James Daschuk, *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life* (Regina, SK: University of Regina Press, 2013).

¹⁴ See Richard J. Evans, *The Third Reich at War: How the Nazis Led Germany from Conquest to Disaster* (London: Allen Lane, 2008), pp. 160–1, 171–5, 197. Mennonite communities in southern Ukraine were devastated by the Russian Civil War in 1918–21, famine in 1921–2, and deportations as “kulaks,” or rich farmers, in the early 1930s. James Urry, *Mennonites, Politics, and Peoplehood: Europe–Russia–Canada, 1525 to 1980* (Winnipeg: University of Manitoba Press, 2006), pp. 137–40; Benjamin W. Goossen, *Chosen Nation: Mennonites and Germany in a Global Era* (Princeton: Princeton University Press, 2017), pp. 149–53.

¹⁵ See Goossen, *Chosen Nation*, pp. 147–73; Aileen Friesen, “Soviet Mennonites, the Holocaust & Nazism: Part 1,” *Anabaptist Historians: Bringing the Anabaptist Past into a Digital Century*, April 25, 2017, available online at <https://anabaptisthistorians.org/2017/04/25/soviet-mennonites-the-holocaust-nazism-part-1/>, accessed June 21, 2018; Friesen, “Mennonites and the Holocaust: Soviet Union and Mennonite-Jewish Connections,” *Anabaptist Historians*, March 20, 2018, available online at <https://anabaptisthistorians.org/2018/03/20/mennonites-and-the-holocaust-soviet-union-and-mennonite-jewish-connections/>, accessed June 21, 2018.

It has been argued that the Nazi policy of acquiring *Lebensraum* in the east and replacing the indigenous population with white settlers was not just similar to, but was partly inspired by, the American doctrine of “Manifest Destiny” that lay behind the conquest and settlement of the West and removal of many Native Americans. This argument is relevant to this book as it is a possible example of a transfer from the Great Plains to the steppes. There is evidence to support the idea that the Nazi policy drew on American actions in the West. In 1928, Hitler spoke with approval about how the Americans had “gunned down the millions of Redskins to a few hundred thousand, and now keep the modest remnant under observation in a cage.”¹⁶ In October 1942, during the German invasion of the Soviet Union, Hitler announced that there was “only one duty,” which was “to Germanize this country by the immigration of Germans, and to look upon the natives as Redskins.”¹⁷ Arguments that Hitler’s policy of *Lebensraum* and extermination in the east were modeled directly on the American conquest of the West have attracted critics who have not found sufficient evidence for a strong, causal, connection.¹⁸ While such debates are beyond the scope of this book, the United States’ conquest of the Great Plains and displacement of its previous inhabitants in the second half of the nineteenth century created the circumstances in which influences and transfers from the steppes of the Russian Empire and Soviet Union could partly shape the next stage in the region’s history.

The settlement of the Great Plains by Euro-Americans and the development of agriculture were achieved also at the expense of the region’s distinctive environment.¹⁹ Anthropogenic environmental change did not start with the arrival of this latest wave of settlers. There have been debates concerning the impact of Native Americans on the plains environment before Euro-American settlement. Notions of “Indians” as more ecologically minded than the settlers who replaced them have been advanced and

¹⁶ James Q. Whitmore, *Hitler’s American Model: The United States and the Making of Nazi Race Law* (Princeton: Princeton University Press, 2017), pp. 9–10 (quotation from p. 9). For a comparative study making the connection, see Carroll P. Kakel III, *The American West and the Nazi East: A Comparative and Interpretive Perspective* (London: Palgrave Macmillan, 2011).

¹⁷ Goossen, *Chosen Nation*, pp. 147–8.

¹⁸ Jens-Uwe Guettel, “The US Frontier as Rationale for the Nazi East? Settler Colonialism and Genocide in Nazi-Occupied Eastern Europe and the American West,” *Journal of Genocide Research* 15 (2013), 401–19; Westermann, *Hitler’s Ostkrieg and the Indian Wars*.

¹⁹ On the environmental history of the Great Plains and American West, see James E. Sherow, *The Grasslands of the United States: An Environmental History* (Santa Barbara, CA: ABC-CLIO, 2007); Sara Dant, *Losing Eden: An Environmental History of the American West* (Malden, MA: Wiley Blackwell, 2017).

challenged.²⁰ In shaping the landscape to suit their purposes, Native Americans contributed to the evolution, and in places creation, of the grassland ecosystem. Plains Indians burned the grasslands to assist them in hunting bison and other large ungulates. They set fire to some areas of land to compel the animals to graze in others, such as river bottoms, where it was easier to hunt them. Plains Indians periodically burned the plains to promote the growth of fresh grasses to provide better fodder for their prey. They also used fire to clear land for crops. Some of the Euro-Americans who ventured into the plains found fire deployed against them to force them out of the ravines or woodland where they were seeking cover or to drive them away altogether. A consequence of setting fires was to promote the growth of some kinds of vegetation over others. Regular burning was favorable to annual plants, in particular grasses, but discouraged woody vegetation. Fire harmed many species of trees and shrubs, particularly young saplings, thus inhibiting the spread of woodland out of river valleys and ravines to the high plains. The bison and other animals the Plains Indians nurtured were also detrimental to tree growth as they grazed on and destroyed young trees. There were further reasons why there were few trees in the Great Plains that were unconnected with human activity, such as the relatively low precipitation and types of soil that were unsuitable for many species of arboreal vegetation, but the use of fire by Plains Indians was a significant factor, especially in the eastern plains.²¹ Scholars have also drawn attention to the role of Native Americans, especially once they had acquired horses and firearms, in the decline in the numbers of bison even before white Americans engaged in large-scale hunting in the second half of the nineteenth century. But, it was the Euro-Americans who delivered the coup de grâce to the vast herds of bison that once roamed the plains, driving them to the brink of extinction by the end of the century.²²

Euro-American settlement and the development of European-style agriculture marked a turning point in the environmental history of the

²⁰ See Shepard Krech III, *The Ecological Indian: Myth and History* (New York: W. W. Norton, 1999); Michael E. Harkin and David Rich Lewis, eds., *Native Americans and the Environment: Perspectives on the Ecological Indian* (Lincoln: University of Nebraska Press, 2007); Geoff Cunfer, "Overview: The Decline and Fall of the Bison Empire," in Cunfer and Waiser, eds., *Bison and People*, pp. 10–12.

²¹ See Daniel I. Axelrod, "Rise of the Grassland Biome, Central North America," *Botanical Review* 51, 2 (1985), 163–201; Krech, *Ecological Indian*, pp. 104–22; Stephen J. Pyne, *Fire: A Brief History* (Seattle: University of Washington Press, 2001), pp. 58–63.

²² See Dan Flores, *The Natural West: Environmental History in the Great Plains and Rocky Mountains* (Norman: University of Oklahoma Press, 2001), pp. 49–70; Andrew Isenberg, *The Destruction of the Bison: An Environmental History* (New York: Cambridge University Press, 2000); Cunfer and Waiser, eds., *Bison and People*.

Great Plains. As the settlers converted much of the land to farms and ranches, for crops and grazing, they greatly reduced the rich biodiversity of a region once inhabited by such an array of wild life that Dan Flores called it the “American Serengeti.”²³ The native flora of the vast areas of grasslands, with tall grasses in the east and short grasses in the west, and the colorful array of wild flowers and other plants, became increasingly rare as land was plowed up, sown with crops introduced from outside, in addition to corn, or subjected to intensive grazing.²⁴ Geoff Cunfer has termed plowing grassland as “the ecological equivalent of genocide,” and the “plow-up of the Great Plains” as “the most important ecological change to emerge out of the shift from Indian to Euro-American land use.” “The act of plowing,” Cunfer continued, “alters vegetation, animal populations, water dynamics, and soil chemistry and physics in catastrophic ways.”²⁵ Russian scientists have made similar assessments of plowing up the steppes.²⁶

From the perspective of the first generation of Euro-American settlers, this transformation of the plains environment entailed back-breaking labor as they engaged in the “arduous, expensive, and time-consuming process” of “sod busting”: breaking up the “hard, compact, and tenacious” soil bound by the dense and thickly matted roots of the prairie grasses that had been growing there largely undisturbed for millennia. This was not just very hard work for the settlers, but required particular techniques, special plows, and heavy oxen to pull them. Even with the best equipment and strongest draft animals, the most a farmer could hope for was to break one acre a day.²⁷ And yet, from around 1870 until about 1930, millions of plains farmers succeeded in plowing up over 100 million acres of grassland. While the main focus of this book is on arable farming, the agricultural economy in the region as a whole was diverse. Throughout the plains region the total proportion of the land that was plowed up amounted to around 30 percent. In the more humid eastern part, around half the land was plowed for crops, while in the more arid western part, only 10–20 percent was plowed up, the rest used for grazing domesticated livestock, in

²³ Dan Flores, *American Serengeti: The Last Big Animals of the Great Plains* (Lawrence: University Press of Kansas, 2016).

²⁴ See Cunfer, *On the Great Plains*, pp. 16–68; Carolyn Hull Sieg, Curtis H. Flather, and Stephen McCanny, “Recent Biodiversity Patterns in the Great Plains: Implications for Restoration and Management,” *Great Plains Research* 9, no. 2 (1999), 277–313.

²⁵ Cunfer, *On the Great Plains*, pp. 16, 35.

²⁶ A.A. Chibilev, *Priroda znaet luchshe* (Ekaterinburg: YrO RAN, 1999), p. 173.

²⁷ Danbom, *Sod Busting*, p. 47.

particular cattle, in contrast to the undomesticated animals that Plains Indians had hunted.²⁸

The agricultural settlement of the plains was not a steady progression, but fluctuated between years of advance and retreat that coincided with favorable and unfavorable climatic conditions, especially the amount of rainfall, and in the market for agricultural produce. In good years when the rains came and the markets were good, settlement and agriculture expanded. Plains farmers experienced good years for much of the 1870s and first half of the 1880s, encouraging further settlement and expansion. High demand for wheat during the First World War led to high prices and a further growth in the area of crop land. On the other hand, in bad years when the rains failed or the plains were visited by grasshoppers and other pests that destroyed crops, or when market demand was low, the agricultural settlement of the plains slowed or retreated. Farms were abandoned. Settlers moved away. They went back to their previous homes or on to seek new lives on the west coast. The late 1880s and much of the 1890s witnessed droughts and low prices for farm produce. The more arid western plains were worst affected. Parts of western Kansas lost a quarter of their population between 1888 and 1898. Other areas in the plains saw farm abandonment on a larger scale.²⁹

The experiences of one settler family were portrayed in her memoir by Rachel Calof, a Jewish migrant from the Russian Empire. She moved to North Dakota in 1894 with her husband and his extended family. She described how, in the desperate cold of their first winters, three families lived for several months in a sod house measuring twelve by fourteen feet, where they were crammed together with their livestock. Over the following years, as they worked hard to establish a successful farm in the face of the harsh environment, they experienced setbacks when their crops, livestock, buildings, and hard-won achievements were damaged by gophers, hailstorms, and lightning strikes. Fear for her children when they fell ill, with doctors several days' journey away, pervades her memoirs.³⁰ The arduous

²⁸ Cunfer, *On the Great Plains*, pp. 8, 16–36. See also Kenneth M. Sylvester and Geoff Cunfer, “An Unremembered Diversity: Mixed Husbandry and the American Grasslands,” *AH* 83 (2009), 352–83; Kenneth M. Sylvester, “Ecological Frontiers on the Grasslands of Kansas: Changes in Farm Scale and Crop Diversity,” *Journal of Economic History* 69 (2009), 1041–62.

²⁹ See, for example, Danbom, *Sod Busting*, pp. 66–7, 96–101. See also Kevin Z. Sweeney, *Prelude to the Dust Bowl: Drought in the Nineteenth-Century Southern Plains* (Norman: University of Oklahoma Press, 2016); Richard White, *It's Your Misfortune and None of My Own: A History of the American West* (Norman: University of Oklahoma Press, 1991), pp. 227–31.

³⁰ Rachel Calof, *Rachel Calof's Story: Jewish Homesteader on the Northern Plains*, ed. J. Sanford Rikoon (Bloomington: Indiana University Press, 1995).

lives of the pioneers, from Europe and the eastern United States, were captured by writers such as Willa Cather. She drew on her own experiences with her family, who moved to Nebraska from Virginia in the 1880s, in her Great Plains novels.³¹

Seared into the American memory are the hard years of the Dust Bowl in the 1930s, when the plains were hit by extreme drought,³² which dried out the top soil and allowed it be blown away by high winds. Coinciding with the economic disaster of the Great Depression, many plains farmers could not withstand the double catastrophe. Banks foreclosed on bankrupt farms, farmers and their families abandoned their land and headed off in search of hope. The Dust Bowl conjures up images of the skies blackened by dust storms, abandoned farms, “Okies” leaving the plains, heading west along Route 66 for a promised land in California, and Dorothea Lange’s photograph of the “Migrant Mother” anxious about her children. The human story of the Dust Bowl was reinforced by John Steinbeck’s epic novel *The Grapes of Wrath*, published in 1939, and John Ford’s movie of 1940.

The prevailing narrative of the Dust Bowl has been a declensionist one that challenged the progressive history of American settlement of the Great Plains told by Walter Prescott Webb (whose history was published on the eve of the disaster in 1931). In the declensionist interpretation, the Euro-American agricultural settlers, who had come from outside the plains and were supported by the government and the banks, had a destructive impact on a fragile grassland environment they did not understand. The settlers plowed up too much land, including areas unsuitable for farming, used inappropriate methods to cultivate the soil, and overgrazed other land. The fertile soils yielded bumper harvests in wet years, but the settlers reaped only misery, and choked on the dust, in bad years when the rains failed and the winds blew the top soil. These were the findings of the House of Representative’s Great Plains Committee, which submitted its report, “The Future of the Great Plains,” in 1937. The Committee concluded: “Nature has established a balance in the Great Plains . . . The white man has disturbed this balance.” In contrast to the Plains Indians, who the report’s authors believed had lived in “harmony” with “nature,”

³¹ Willa Cather, *O Pioneers!* (Oxford: Oxford University Press, 1999) [1st published 1913]; Cather, *My Antonia* (Oxford: Oxford University Press, 2006) [1st published 1918]. Life for family farmers in the plains was still arduous a century later. See Sarah Smarsh, *Heartland: A Memoir of Working Hard and Being Broke in the Richest Country on Earth* (New York: Scribner, 2018).

³² See Benjamin I. Cook, Richard Seager, and Jason E. Smerdon, “The Worst North American Drought Year of the Last Millennium: 1934,” *Geophysical Research Letters* 41, no. 20 (2014), 7298–305.

the settlers' "destructive tendencies" resulted from their "lack of understanding concerning the critical differences between the physical conditions of the Great Plains . . . and those . . . east of the Mississippi whence they had come."³³ (The notions that Native Americans had lived in "harmony" with the "natural world" and that nature establishes a "balance," were widely held at the time, but have since been challenged.³⁴)

The version of the story of the Dust Bowl that blamed the plains farmers for their own plight, because they had upset the "balance," was graphically portrayed in the documentary film "The Plow that Broke the Plains" made by Pare Lorentz for the federal government Resettlement Administration in 1936.³⁵ The narrative has been followed by many historians of the Dust Bowl, including the prominent environmental historian and native of Kansas, Donald Worster. In 1979, following detailed research in the parts of the plains most badly affected, he argued: "Some environmental catastrophes are nature's work, others are the slowly accumulating effects of ignorance or poverty. The Dust Bowl, in contrast, was the inevitable outcome of a culture that deliberately, self-consciously, set itself that task of dominating and exploiting the land for all it was worth." Worster blamed capitalism for the ecological and human disaster.³⁶

Not all scholars, and certainly not many plains farmers, have accepted this version. From the 1930s to the 1960s, Kansas historian and plainsman James Malin railed against the view that the farmers were responsible for the Dust Bowl. He pointed out that dust storms were not a new phenomenon, but had occurred before the plains were plowed up. He argued that,

³³ U.S. Great Plains Committee, *The Future of the Great Plains* (Washington, DC: The House of Representatives, 1937), pp. 1–2, 49–50, 63. See also Gilbert F. White, "The Future of the Great Plains' Re-visited," *GPQ* 6, no. 2 (1986), 84–93.

³⁴ On Native Americans and "nature," see pp. 44–5, and on changing views of "nature" among ecologists, see Frank N. Egerton, "Changing Concepts of the Balance of Nature," *The Quarterly Review of Biology* 48, no. 2 (1973), 322–50; Jianguo Wu and Ori L. Loucks, "From Balance of Nature to Hierarchical Patch Dynamics: A Paradigm Shift in Ecology," *Quarterly Review of Biology* 70, 4 (1995), 439–66. Earlier in the twentieth century, the ecologist Frederic Clements had proposed a theory of succession of plant communities leading to a stable equilibrium, or climax, based on his field work in the plains of his native Nebraska. Frederic E. Clements, *Plant Succession: An Analysis of the Development of Vegetation* (Washington, DC: The Carnegie Institution, 1916). See also A. G. Tansley, "Obituary Notice: Frederic Edward Clements, 1874–1945," *Journal of Ecology* 34 (1947), 194–6.

³⁵ Pare Lorentz (1936). *The Plow That Broke the Plains*, U.S. Resettlement Administration, film, available online at www.archive.org/details/PlowThatBrokeThePlains1, accessed May 23, 2018; Finis Dunaway, "New Deal Jeremiahs," *EH* 12 (2007), 308–12.

³⁶ Donald Worster, *Dust Bowl: The Southern Plains in the 1930s*, 25th anniversary edition (New York: Oxford University Press, 2004), pp. 4–5, 106–7, 140–1, 151. For a powerful restatement of this argument, see Hannah Holleman, *Dust Bowls of Empire: Imperialism, Environmental Politics, and the Injustice of "Green" Capitalism* (New Haven, CT: Yale University Press, 2018).

over the longer term, plains farmers had shown an ability to adapt to conditions in the region. He based his arguments on his considerable knowledge of Kansas history and sought to understand the land and environment of the plains by drawing on the natural sciences, in particular ecology.³⁷ Building on Malin's work, Cunfer presented a "middle ground" between the declensionist and progressive narratives of Great Plains history. Insisting that people are a part of the natural world, Cunfer used Geographic Information Systems to analyze data on land use and the climate in the precise region affected by the Dust Bowl. He concluded that the main cause of the ecological disaster in the plains in the 1930s was the drought. Plowing up land may have tipped the balance in parts of the southern plains, but overall he argued the weather was a more important cause than settler agriculture, careless or otherwise. Echoing Malin, he pointed out that there were dust storms on land that had never been plowed up. Cunfer concluded that plains farmers achieved a "sequence of periods of temporary equilibrium" interrupted by disruptions such as the Dust Bowl that prompted farmers – most of whom did not leave the region – to seek new ways of working with the land.³⁸ The understandable attention paid to the Dust Bowl years, moreover, has overshadowed the longer-term history of agriculture and the environment in the Great Plains since the advent of Euro-American settlement.³⁹

What the years of droughts and dust storms, such as those in the 1890s and 1930s, indicated – and this is important for the argument advanced in this book – was the types of crops and agricultural techniques that were effective in extreme conditions. The bad years also indicated the importance of acquiring an understanding of the plains environment that could inform identifying the most appropriate crops and methods. This is where the Russian experience of settling and cultivating the steppes came in. In

³⁷ See James C. Malin, "The Adaptation of the Agricultural System to Sub-Humid Environment: Illustrated by the Activities of the Wayne Township Farmers' Club of Edwards County, Kansas, 1886–1893," *AH* 10, 3 (1936), 118–41; Malin, *Winter Wheat in the Golden Belt of Kansas: A Study in Adaption to Subhumid Geographical Environment* (Lawrence: University of Kansas Press, 1944); Malin, "Dust Storms 1850–1900," *Kansas Historical Quarterly* 14 (1946), 129–44, 265–96, 391–413; Malin, *The Grasslands of North America: Prolegoma to Its History* (Lawrence, KS: privately published, 1947). On Malin's work, see also p. 24.

³⁸ Cunfer, *On the Great Plains*, pp. 3–13, 150–63, 232–40 (quote from p. 236). See also Timothy Egan, *The Worst Hard Time: The Untold Story of Those Who Survived the Great American Dust Bowl* (New York: Houghton Mifflin Harcourt, 2006), pp. 9–10; Kenneth M. Sylvester and Paul W. Rhode, "Making Green Revolutions: Kansas Farms, Recovery, and the New Agriculture, 1918–1981," *AH* 91 (2017), 342–68.

³⁹ On narratives of the history of the Great Plains and the Dust Bowl, see William Cronon, "A Place for Stories: Nature, History, and Narrative," *JAH* 78 (1992), 1347–76.

many ways, it resembled, and had anticipated, the agricultural settlement of the Great Plains.

In the steppes, agricultural settlers, mostly of European origins, had moved out of the more humid, forested regions of central Russia, the north of today's Ukraine, and parts of central Europe to the grasslands that lay in the south and southeast of the Russian Empire. Backed by the Russian state and its armed forces, settlers pushed the indigenous peoples, who lived from a mixture of pastoralism, nomadic and settled, and some crop cultivation, to the margins or into exile. The settlers who displaced them engaged in extensive livestock husbandry for several decades before gradually plowing up much of the grasslands to cultivate crops, principally grain, in the fertile soil. Like their counterparts in the Great Plains, they lived in dugouts in the early years, broke the sod of the virgin land with heavy plows pulled by draft animals. They experimented with crops from their previous homes as well as varieties acquired locally as they sought those most suitable for the conditions. The process of adaptation to the steppe environment was easiest for settlers in the more moderate conditions near the heartland of Russia in the eighteenth century. It became harder as the frontier of settlement moved southeast and east over the nineteenth century. In the late nineteenth and early twentieth centuries, some settlers in the north today's Kazakhstan found soils that were shallower and less fertile than elsewhere in the steppes. They struggled in the harsher climate with more frequent droughts. Throughout the steppe region, just as in the United States, the Russian and later the Soviet governments supported research to inform advice to farmers. They also largely disregarded the knowledge and experience of the indigenous peoples. The settlers managed, despite the difficulties and recurring droughts, to create a flourishing agricultural economy in those parts of the steppes that were more favorable to crop cultivation. In the late nineteenth and early twentieth centuries, in many years, the Russian Empire was the world's largest grain exporter. Grain from the steppes was exported to other parts of Europe and the Mediterranean world.⁴⁰

⁴⁰ See Willard Sunderland, *Taming the Wild Field: Colonization and Empire on the Russian Steppe* (Ithaca, NY: Cornell University Press, 2004); Leonard Friesen, *Rural Revolutions in Southern Ukraine: Peasants, Nobles, and Colonists, 1774–1905* (Cambridge, MA: Harvard Series in Ukrainian Studies, 2009); David Moon, *The Plough that Broke the Steppes: Agriculture and Environment on Russia's Grasslands, 1700–1914* (Oxford: Oxford University Press, 2013); Kelly O'Neill, *Claiming Crimea: A History of Catherine the Great's Southern Empire* (New Haven, CT: Yale University Press, 2017), pp. 164–218; Sarah Cameron, "People Arrive but the Land Does Not Move: Nomads, Settlers, and the Ecology of the Kazakh Steppe, 1870–1916," in *Eurasian Environments: Nature and Ecology in Imperial Russian and Soviet History*, ed. Nicholas Breyfogle

While there are similarities between the environmental histories of agricultural settlement of the Great Plains and the steppes, there are differences that are important for this book. First, the Russian state had conquered large parts of the Eurasian steppe by the late eighteenth century, but had started to promote the agricultural settlement of the region by European, including Slavic, farmers several decades earlier. This was long before similar processes in the Great Plains that took off only in the 1860s. Thus, there was significant prior Russian experience in the steppes of identifying appropriate crops, techniques, and gaining a deeper understanding of the steppe environment. Second, the Great Plains are orientated from north to south, while the steppes extend from east to west, and much of the steppe region is on a similar latitude to the Canadian Prairies and northern Great Plains. One of the consequences is that the steppe region as a whole has a slightly harsher climate. The climatic conditions in the eastern steppes in southern Siberia and the north of today's Kazakhstan are significantly more severe than in the central and southern plains (see pp. 8–10). The harsher environment of the steppe region, and the limited availability of land well suited for agriculture in adjoining regions (there is no equivalent of the prairies of the Midwest in Eurasia), has meant that a far larger proportion of the steppes has been plowed up than the Great Plains. Over 30 percent of the steppe region of the European part of the Russian Empire had been plowed up by the late 1880s, and over half in the parts with more favorable conditions, for example, the region to the north of the Black Sea where the Mennonites lived. By the end of the twentieth century, 57 percent of the entire Eurasian steppe had been converted to arable land.⁴¹ The harsher conditions in the steppes as a whole and the cultivation of land with marginal conditions for farming has meant that varieties of crops and techniques that worked in average years in the steppe region were capable of withstanding all but the greatest deviations from average conditions in most of the Great Plains. Most

(Pittsburgh, PA: University of Pittsburgh Press, 2018), pp. 43–59. On particular difficulties experienced by some settlers in today's northern Kazakhstan in the late nineteenth and early twentieth centuries, see, for example, TsGA RK, f.318, op.1, d.18, ll.5-ob., 15, 18, 26; f.30, op.1, d.5, l.194. On pastoral nomadism, see N. E. Masanov, *Kochevaia tsivilizatsiia kazakhov: osnovy zhiznedeiatel'nosti nomadnogo obshchestva* (Almaty: Sotsinvest, 1995); Ian W. Campbell, "The Scourge of Stock Raising: Zhut, Limiting Environments, and the Economic Transformation of the Kazakh Steppe," in *Eurasian Environments*, ed. Breyfogle, pp. 60–74.

⁴¹ David Moon, "The Grasslands of North America and Russia," in *A Companion to Global Environmental History*, eds. J. R. McNeill and Erin Stewart Mauldin (Chichester, UK: Wiley-Blackwell, 2012), pp. 247–62; A. A. Chibilev and O. A. Grosheva, *Ocherki po istorii stepovedeniia* (Ekaterinburg: UrO RAN, 2004), pp. 34–5.

hardy were the crop varieties cultivated in the southern Siberia and northern Kazakhstan. In the late nineteenth and early twentieth centuries, American “plant explorers” appreciated the significance of the more extreme conditions in the eastern steppes and collected hardy plants that grew there (See pp. 95–7).

Thus, when the agricultural settlement of the Great Plains by outsiders developed from the 1860s, the settlers and their advisors in the USDA, agricultural colleges, and experiment stations stood to learn from the prior experience in the steppes of Eurasia of plowing up and cultivating a semi-arid grassland, and one where, for the most part, conditions were harsher than in much of the North American plains. Before this would take place, however, there were a series of barriers that would have to be overcome.