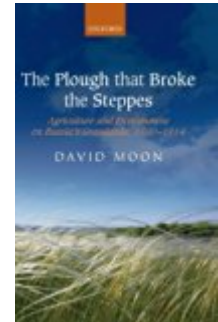


**David Moon.** *The Plough that Broke the Steppes: Agriculture and Environment on Russia's Grasslands, 1700–1914.* Oxford: Oxford University Press, 2013. xx, 319 S. \$125.00, cloth, ISBN 978-0-19-955643-4.



**Reviewed by** Brian Bonhomme

**Published on** H-Russia (March, 2014)

**Commissioned by** Randall Dills (University of Louisville)

Author David Moon has been doing some plowing of his own here, opening fertile new tracts in environmental history by examining in close detail the Russian encounter with the steppes during the eighteenth and nineteenth centuries. Prior to this time, Russian expansion had mostly been directed northward and eastward, especially at the vast forested spaces of Siberia in search of furs. But beginning in the second half of the seventeenth century, further territorial expansion gradually led the Russians south, farther and farther out onto the open steppes. For a culture whose history had always been tied primarily to the forest, or to marginal forest-steppe lands, encountering and settling these vast open and flat grasslands nearly bereft of any landmarks, Moon tells us, was in some measure “disorienting” and certainly challenging. The enterprise seemed highly worthwhile however, for once cleared of their characteristic “oceans” of native feather grass (*kovyl'*), the fertile black soils yielded super-abundant harvests. Unfortunately, this bonanza was unreliable. Steppe environments are shaped

by relatively dry climates, and their native grasses are accordingly drought tolerant. Agricultural crops require higher and more constant rainfall and are highly susceptible to drought. The result was a tenuous cycle of bumper harvests punctuated by devastating drought-caused crop failures and consequent famines. Stripped of their natural vegetation, and plowed and sown using techniques from farther north, steppe farm fields were also very susceptible to erosion.

On the one hand, the Russians instinctively sought solutions via irrigation and afforestation. But in the long run, neither method worked all that well. Official enthusiasm for large-scale irrigation of the steppes faded progressively during the nineteenth century as both scientific studies and practical experience (much of it gained by Mennonite farmers) highlighted the challenges presented by the region’s unique geomorphology, climate, and ecology, including an apparently insuperable problem: raising water from relatively low-lying rivers onto higher land, while technologically feasible, was simply uneconomical, espe-

cially given the relatively low prices for grain. The steppes, then, would in some measure remain as they had been, fertile and abundant in the main, but prone to crop failures in dry years. On the other hand, by around 1900 new agricultural techniques were emerging to help maximize and conserve natural soil moisture. These led to improved results, but did not fully “solve” the original “problems.” (This, in turn, set the context for a much more ambitious scheme to “improve” once and for all the agricultural conditions of the steppes launched after the Second World War under the title “The Great Stalin Plan for the Transformation of Nature.” Returning to the methods of artificial irrigation and tree planting—but this time on a hugely bigger scale, especially with the trees—the project was similarly unsuccessful and was abandoned within a few years. These events are beyond the timeframe of Moon’s book, however, and are discussed only briefly in the concluding chapter.) Realities on the nineteenth-century steppes conditioned a decision by the Russian authorities to direct major investment in large-scale irrigation infrastructure instead at the Caucasus and Central Asia, both deemed better likely to yield a decent return through cultivation of high-demand warm-weather crops like tea, cotton, and tobacco. Although successful in the short term, in time this would condition subsequent and ongoing environmental problems, such as the desiccation of the Aral Sea due to excessive tapping of its feeder rivers for irrigation.

A similar pattern emerges in the case of tree planting, the other primary initiative undertaken to improve grain agriculture on the steppes. Here too the plan was to “fix” problems by altering the natural regime—to reduce soil erosion, moderate the effects of dry winds, and increase rainfall. As with irrigation, experiences accrued over the nineteenth century led the Russians to question the benefits of these exercises and to try alternative approaches instead, ones that—at least in some measure—worked *with* rather than against the natural steppe environment. Unlike irrigation,

which was undertaken primarily as a practical potential solution to environmental challenges, afforestation also had important *cultural* contexts since it promised to make the steppes more “Russian” and familiar. Moon devotes considerable space to settlers’ and explorers’ initial impressions of the steppes, finding that over and over they described them first and foremost as “treeless”—in other words, they noticed most of all what was (in their minds) absent, not what was present. Tree planting on the Russian steppes was thus—as Moon notes—very comparable to efforts by English settlers at about the same time to make places like Australia, New Zealand, and North America more culturally recognizable via the importation of home-country plants and animals and the shaping of more familiar landscapes.

Russians’ nineteenth-century experiences on the steppes in many ways foreshadowed those of Americans on the plains in the twentieth. In both cases relatively dry grasslands were plowed over and the fertile soils put under agriculture; farming methods and cultural contexts from more humid and forested neighboring areas were brought to bear; and the results included soil loss, crop failure, and an eventual realization of the uniqueness of semi-arid grassland environments. Moon also links his research productively to other broad issues in environmental history, for example, by seeing the whole steppe as a sort of “island” that was “colonized” by outsiders in ways, and with consequences, analogous to those Richard Grove has described in the case of small tropical islands colonized by the French, British, and others from the early seventeenth century forward (*Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860* [1995]). In both cases, fragile environments were rapidly altered and damaged creating object lessons from which European scientists began to understand ecological principles. As Moon puts it, “societies where settlers have encountered and adapted their ways of life to different environmental conditions have

provided fertile ground for innovation in understanding and managing the relations between the human and non-human worlds” (p. 284).

It is hard to find any significant faults with this book (except its very high price, perhaps). Moon has done his research and produced an exhaustive and authoritative account. The “List of Archival Sources Cited” notes no fewer than forty document collections from seven different archives in six different cities in Russia and Ukraine. Moon has also made numerous trips onto the steppes himself in order to better understand this unique environment. In the English language there is very little scholarship on *any* aspect of Russian environmental history prior to the mid-nineteenth century, so this book, which goes back to about 1700, is welcome in that regard, too.

In sum, this is an important and well-executed study that should be read by students of Russian history and environmental history alike. Moon’s explicit linking of Russian steppes history with the American Dustbowl experience makes the book relevant also to a wider American history audience.

If there is additional discussion of this review, you may access it through the network, at <https://networks.h-net.org/h-russia>

**Citation:** Brian Bonhomme. Review of Moon, David. *The Plough that Broke the Steppes: Agriculture and Environment on Russia’s Grasslands, 1700–1914*. H-Russia, H-Net Reviews. March, 2014.

**URL:** <https://www.h-net.org/reviews/showrev.php?id=39622>



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.