corn in the human diet, but she does not neglect the importance of corn in feeding livestock; in this sense we consume corn even when we eat a pork chop or a chicken breast. Clampitt traces the growth of the technology and science of corn, emphasizing such developments as the rise of the John Deere plow, the tractor, hybrid corn, no-till agriculture, and biotechnology. She traces the rise of meatpackers in Chicago within the context of the corn-livestock complex. She concludes with an evenhanded assessment of the problems that beset humans within the context not merely of corn but of agriculture in general.

Midwest Maize deserves praise for its comprehensive treatment and readability. Non-scientists are the intended audience. Despite its excellence, a few details remain unclear. The book leaves readers to infer that American Indians were the first to create corn through purposeful breeding. Like so many agronomically important plants, corn has flowers, but only in the eighteenth century would European scientists understand that flowers are the reproductive structures of angiosperms. American Indians, therefore, could not have had any inkling of how to breed plants. Moreover, Clampitt follows conventional wisdom in attributing the invention of the seed drill to Jethro Tull, though she might have noted that ancient Egypt devised an important precursor. Covering the science of corn with great skill, Clampitt nonetheless omits the Southern Corn Leaf Blight in 1970 and 1971. In its own way that disaster confirmed the dangers of genetic uniformity, an issue that remains problematic for a number of crops. Clampitt repeats the statement that corn is the food plant that is most efficient in converting sunlight, water, and soil nutrients into biomass, though, depending on whom one reads, the potato and sugarcane apparently vie for that honor. Yet it would be unfair to pursue this line of thought at length. Everyone, amateur or professional, with an interest in corn should read Midwest Maize.

Pemmican Empire: Food, Trade, and the Last Bison Hunts in the North American Plains, 1780–1882, by George Colpitts. Studies in Environment and History. New York: Cambridge University Press, 2015. xii, 316 pp. Maps, illustrations, graphs, glossary, notes, bibliography, index. \$90.00 hard-cover

Reviewer Michel Hogue is assistant professor of history at Carleton University. He is the author of *Metis and the Medicine Line: Creating a Border and Dividing a People* (2015).

Those of us accustomed to watching our weight have learned to pay attention to the fat in our diets. George Colpitts thinks that historians ought to pay the same attention to the importance of fat in history. In this original study, Colpitts reexamines the history of the traffic in bison products on the northern Great Plains, focusing on the transformative effects of the trade in pemmican, "a native foodstuff composed mostly of large quantities of bison fat and dried, pounded meat" (1). Colpitts shows how the pemmican produced by indigenous women and men was transformed into one of the region's principal commodities. He argues that the nature of pemmican—including the caloric boost provided by its mix of fats and proteins—along with the social relations involved in its production, use, and trade, changed the societies and histories of plains indigenous peoples and the colonial history of northwestern North America.

With its close attention to bison as food, *Pemmican Empire* recasts the historical literature on bison and its demise. Colpitts draws the details of his story from the vast archives generated by fur trade entities on the northern plains and from an omnivorous review of the academic literature in archaeology, climate science, human physiology, and nutrition. Colpitts's research also took him to bison ranches and pemmican camps in Manitoba. In his acknowledgments, Colpitts even thanks the butchers who taught him how bison meat comes off the bone.

And why not? The finer details of butchery are in fact important to the story that Colpitts tells. He details how fur company employees adapted Dene traditions in pemmican making to the plains, thereby tapping the vast energy sources that quite literally fed the expansion of trade networks in the British Northwest. Plains food resources were critical to sustaining the human brigades that plied the waterways through the fur-rich but food-poor boreal forests. The specific ecological circumstances of the prairie steppe and parkland edge were key to the expansion of pemmican production. Not only did climatic conditions make the bison fatter and their seasonal movements more predictable, but also the colder temperatures at these northern latitudes allowed processors to handle fats with fewer worries that warm weather might cause them to spoil. Meanwhile, the kin-based food-sharing networks among the Crees, Assiniboines, and other northern plains peoples that had long existed as a hedge against hunger in an unpredictable environment allowed traders to amass large surpluses of bison products for use in the fur trade. These adaptations to plains hunting and processing traditions laid the basis for mass factory food production, especially as the growing market demand for pemmican at the turn of the nineteenth century propelled the trade's expansion.

In this sense, Colpitts's study suggests that an ecological faultline — or "fat frontier" — separated the northern from the central plains and led to diverging histories on either side of that line. To the north, the

exchange of pemmican "created an inseparable society of people where food was produced, traded, and consumed between them" (261). Much of the book traces the cascading consequences of this expanding pemmican trade. For instance, commercial expansion intensified hunting, trapping, and violence as commercial entities competed vigorously to control access to the pemmican that had become so vital to their operations. Among plains peoples, the growing commitment to pemmican production encouraged longer-distance travel, transformed trade patterns, and even propelled the formation of new peoples like the plains Métis, whose emergence Colpitts connects to the economic niche created by the pemmican trade. This book shows how bison meat and fat, just like potatoes, sugar, or other foodstuffs, powerfully shaped human histories. Colpitts shows how bison fat and the energy it provided drove British imperial expansion in northwestern North America.

This "Pemmican Empire," however, was built on the unsustainable harvest of bison. Although much has been written about bison and its demise, this book's geographical focus on the northern plains adds a new dimension to those stories. Colpitts shows, for example, how the familiar story about the decline of the bison commons with the intrusion of the market played itself out in very different ways on the northern side of the "fat frontier." Just as important, he shows how the trade relations that grew up around the preparation and exchange of bison flesh provided the foundational imprint for interactions between indigenous peoples and their would-be colonizers that differed in important respects from that found elsewhere in North America.

Securing the West: Politics, Public Lands, and the Fate of the Old Republic, 1785–1850, by John R. Van Atta. Reconfiguring American Political History. Baltimore: Johns Hopkins University Press, 2014. xiii, 295 pp. Maps, tables, notes, essay on sources, index. \$54.95 hardcover and e-book.

Reviewer James W. Oberly is professor of history at the University of Wisconsin-Eau Claire. He is the author of *Sixty Million Acres: American Veterans and Public Lands before the Civil War* (1990).

More than a century ago, the historian Payson Jackson Treat apologized for writing a book on the history of public land policy, acknowledging that the "subject is dull in itself." Nonetheless, like a physician prescribing a distasteful medicine, Treat insisted in his 1910 book, *The National Land System*, 1785–1820, that some knowledge of the workings of the public lands system was necessary to understand the larger subject of westward movement. Treat offered readers a periodization for understanding the history of public land policy based on the method Con-