depth of the book. These are not mere appendices to be skimmed, but alternative commentaries on the points that Fienup-Riordan raises.

As Fienup-Riordan's work moves toward collaboration, she raises the significant questions of what "collaboration" really means in this context and how it really works. This book is an impressive attempt to put some answers into practice, and one that should spur others to build on her approach. For anyone interested in anthropology, Native peoples, or work in a cross-cultural setting, *Hunting Tradition in a Changing World* is a fascinating journey along one researcher's path to make sense of the shifting landscape of the modern Arctic.

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MUSKOXEN AND THEIR HUNTERS: A HISTORY. By PETER C. LENT. Norman, Oklahoma: University of Oklahoma Press, 1999. xi + 324 p., b&w illus., appendix, notes, bib., index. Hardbound. US\$57.50.

If we test the popularity of the muskox by that touchstone of instant culture, the Internet, it doesn't fare well. With a mere 7000 hits, the muskox is skewered by the rhinoceros (70,000), flattened by the elephant (700,000) and overwhelmed by the dog (7,000,000). We must look to the banteng to find a beast that gets less attention. Perhaps it is this that makes Peter Lent's book both possible and important. The volume of information that Lent had to organize was small enough to be encompassed by one person, but large and complete enough to make a fascinating story, the story of one species and its relationship to man.

Since he wrote an undergraduate term paper on muskoxen in the late 1950s, the author has worked extensively with the species and assiduously collected information. The result is a series of essays that extend chronologically from the Pliocene to the present and from paleontology to the emerging qiviut (fine muskox underwool) industry. The first chapter, on the origins of muskoxen, provides (among many other things) a wonderful description of the Beringian mammoth steppe: open, cool, and arid, but populated by mammoths, huge steppe bison, horses, and occasional muskoxen and their extinct, long-legged relatives. If there were a time machine, it is there that I would go, but I would be careful to avoid lions, scimitar cats, and short-faced bears, having been forewarned by an engaging digression on the response of muskoxen to these predators and to the predators of today.

I might also think it wise to avoid the local people. These dangerous Pleistocene predators appear in the next chapter, which tells us that in Europe and Asia, humans killed muskoxen only occasionally; but then they began to follow the "Muskox Way," a route pioneered by muskoxen, to the extreme north of the Arctic Archipelago. Here, when the climate was a little milder, the pre-Dorset people lived and died, and in places left layer upon layer of muskox bones. Subsequent chapters deal with the relationship of the Dorset, Thule, and Dene peoples to muskoxen and the impact of modern explorers, the hide trade, and trophy seekers.

One could think some of this a little dry, and indeed it might be, if it were not exquisitely embellished with historical analysis, mild archaeological controversy, and a steady undercurrent of muskox biology. And through much of this section, Lent is intent on discreetly undermining one of those comfortable notions that we would all love to accept if only it were true. I mean the idea that indigenous peoples, unlike technological man, did not overexploit their resources. While he certainly does not accuse such people of profligate killing, Lent argues that the imperative needs of subsistence hunters were generally pragmatic and short-term, and that, "when muskox numbers were low, or populations were extirpated, humans turned their attentions elsewhere, either by moving or by shifting to alternate prey" (p. 222). Lent does not support the view that the hunter-gathers of the North were intuitive wildlife managers who successfully maximized sustainable yield.

Later chapters deal with the better-known history of deliberate muskox conservation: restraint of hunting, refuge creation, introduction, reintroduction, and finally renewed hunting and licensed slaughter on a large scale. The author had a direct role in some of this, and he recounts the difficulties—political and practical—in heartfelt detail. In human affairs, hunting is followed by domestication, and here again, Lent's association with the Alaskan experience of muskox "farming" pays dividends. There is no attempt to disguise the failures or the successes, or to cover the skepticism of the many with the driving enthusiasm of a few. It is hard for modern people to achieve in decades what took our Neolithic ancestors millennia to accomplish, and Lent has no illusion that the job is done. On the other hand, there is a persistent optimism that the job can be done and is worth doing.

But just what does domestication of muskoxen mean? Are muskoxen going to be farmed as if they were a monster kind of sheep, or are they to be managed a little like the "browse deer" of the 17th century New Forest? These red deer freely ranged the forest, but were periodically "gathered by a call" and given supplemental feeding in special enclosures. It is said that such deer "were by that means very fat and very tame." Lent clearly suspects that a similar approach might work with muskoxen, and I agree.

A moment's arithmetic shows that about 200 tons of *qiviut* are shed onto the Canadian tundra each year. If only 1% of this could be harvested, it would equal the *qiviut* usually obtained from the commercial muskox hunt on Banks Island. Now one of the enduring things that I have learned from my association with very tame muskoxen is

that they have long memories and are intelligent, inquisitive, and enterprising. Thus, it seems to me that man and muskox should work out a scheme in which both retain their freedom, but a little food is exchanged for a little qiviut. Whether this counts as domestication, I don't know. I do know that if all the qiviut were collected from all the muskoxen in the world, it would only amount to about one-tenth of the world's harvest of cashmere. Qiviut will thus always be a fine, rare, and luxurious fibre.

I share Lent's view that we are at the beginning of a new and fascinating chapter of the man-and-muskox saga. It is a chapter that may include the creation of a new domestic species, and perhaps the largest experiment ever performed by man: the warming of the Western Arctic and the cooling of the East. How will muskoxen fare?

I said at the beginning that this book is a series of essays. This is a good thing, because the work is so tight and information-rich that trying to read it all at once causes information overload—but where else would I have discovered that an Inuit man once used a tame muskox to pull a sled? This is a fine book. I know of no other that gives such an all-embracing history of one species and another.

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