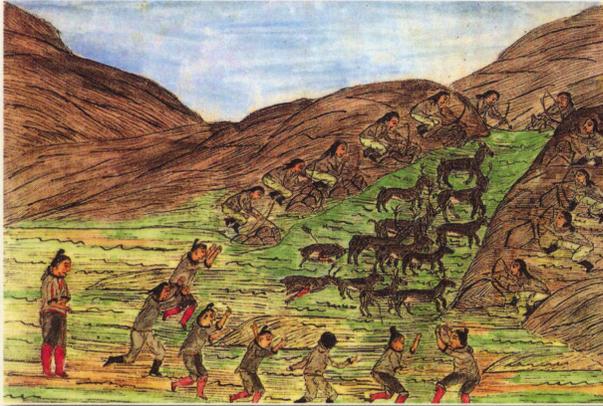


EDITED BY

Kristen Carlson *and* Leland C. Bement



# The Archaeology of Large-Scale Manipulation of Prey

THE ECONOMIC AND SOCIAL  
DYNAMICS OF MASS HUNTING

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*The Archaeology of Large-Scale Manipulation of Prey* explores the social and functional aspects of large-scale hunting adaptations in the archaeological record. Mass-kill hunting strategies are ubiquitous in human prehistory and exhibit culturally specific economic, social, environmental, and demographic markers. Here, seven case studies—primarily from the Americas and spanning from the Folsom period on the Great Plains to the ethnographic present in Australia—expand the understanding of large-scale hunting methods beyond the customary role of subsistence and survival to include the social and political realms within which large-scale hunting adaptations evolved.

Addressing a diverse assortment of archaeological issues relating to the archaeological signatures and interpretation of mass-kill sites, *The Archaeology of Large-Scale Manipulation of Prey* reevaluates and rephrases the deep-time development of hunting and the themes of subsistence to provide a foundation for the future study of hunting adaptations around the globe. Authors illustrate various perspectives and avenues of investigation, making this an important contribution to the field of zooarchaeology and the study of hunter-gatherer societies throughout history.

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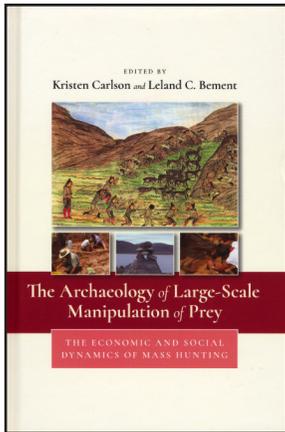
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Cover illustrations: Jens Kreutzmann watercolor (ca. mid-1800s) courtesy of the National Museum and Archive of Greenland (top); © 2011 by Kristen Carlson (bottom, left and right); courtesy of Ulla Odgaard (bottom, middle).





## The Archaeology of Large-Scale Manipulation of Prey: The Economic and Social Dynamics of Mass Hunting

Kristen Carlson and Leland C. Bement, Editors. [University Press of Colorado](https://www.upress.edu/), 2018. 296 pp., 41 B&W images, line drawings, maps, and tables, references. \$73.00 Cloth, \$58.00 Electronic.

*Reviewed by Thomas Loebel, Illinois State Archaeological Society, Prairie Research Institute, University of Illinois at Urbana-Champaign*

It seems I always have a bit of hope, trepidation, and fear when I pick up an edited volume these days. My expectations run high that I'll get a condensed crack-shot overview of a topic or region, and I must admit I also usually enter into the deal with a bit of bias and preconception. My first reaction when I saw this volume was "Mass kills? Not again!" reflecting upon the fact that the vast majority of human hunting likely consists of single kills with low archaeological visibility and also "low academic value." Large kills and bone beds of course gain the lion's share of attention as they have a higher sex appeal in the academic world.

And so it was when I somewhat hesitantly picked up *The Archaeology of Large-Scale Manipulation of Prey: The Economic and Social Dynamics of Mass Hunting*, although by the time I put it down, I was overall pleasantly surprised by the majority of the chapters contained within. While primarily focused on the Plains of North America (and prehistoric bison hunting), the book is ambitious in its geographic and theoretical scope, and succeeds more often than not in its attempt to view the complex issues interconnected to large-scale hunting not just through an archaeological lens, but a social one as well. When it does this, it succeeds best.

Bement's opening chapter sets the stage for the central theme of the book which attempts to examine some of the social, political, and economic forces that surround, prompt, and develop from communal hunting—in short, how and why large-scale hunting may have evolved. He correctly acknowledges issues of identifying the archaeological signature of some of these phenomena and the challenges of projecting back the ethnographic record, yet also assumes that if small kills are the product of small groups, large kills are the product of coalesced groups. I'm not sure I buy that, but the assumption makes for a useful examination of the issues surrounding instances where mass kills can be argued to be the product of social aggregation. Where the volume gets interesting is when the discussion turns to an examination of the reasons where an adaptive value outside of calorie counting may have been a driving force for the development of large scale cooperative hunting (Bement Chapter 1, Graves Chapter 6, Zedeno Chapter 2, Speth Chapter 8).

In Chapter 2 Zedeno takes an interesting environmental determinist approach integrating ethnographic and archaeological evidence to argue that environmentally rich areas habitually occupied by bison herds drew the attention of hunters who aggregated around

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the opportunity for mass kills. This in turn led to the eventual formation of distinct ethnic territories around these resource rich “patches” which were manipulated and defended.

Chapters 3 and 4 present case studies based more strongly in ethnography from Australia and Greenland and examine cases where communal trapping of fish and eel was done to support band aggregations and facilitate ceremonial activities (Balme Chapter 3), or where modern ethnographic information regarding conservation and hunting ethics seem to contradict archaeological evidence for “overkill” and wastage in large scale reindeer hunts (Odgaard Chapter 4). This “gourmet” butchery strategy, where evidence of prime cuts and partial or no butchery of some animals has been noted frequently in the archaeological record and deep into antiquity (Wheat 1972), and may suggest that in certain instances smaller numbers of hunters may have been able take large numbers of animals, far past what immediate needs or processing capabilities were, particularly when natural landforms (arroyos, jumps) or artificial modifications to the landscape (drivelines, nets etc.) were in use.

Chapters 5–7 present data on prehistoric North American bison composition, range, and mobility. Maxwell and Driver present an intriguing approach to the question of whether or not modern day bison herd composition can be used as a baseline comparison for Late Pleistocene herd composition. Using seasonal herd structure of wildebeest as an analogue, they examine the apparent scarcity of calves and yearlings at Plains bison mass kill sites, coming to the conclusion that prehistoric kill assemblages vary significantly from modern herd structure and suggest that researchers report prehistoric herd structure from mass kill assemblages not by discrete age groups, but more along the lines of how modern wildlife biologists report groups as calves >1 year, yearlings 1–2 years old, and adults <2 years with data presented in stacked bar graphs. I’ll leave the merits of this approach up to the specialists.

In Chapter 6 Adam Graves utilizes isotope analysis of teeth from Folsom aged kill sites on the southern Plains to examine bison range mobility and seasonal movements, tying into Bements central theme that resource predictability (bison) supported and fostered group aggregations during which critical social activities could also be conducted. Similarly, in Chapter 7 Carlson and Bement use isotopic data to examine bison herd mobility, range packing, and response to environmental stress during the Folsom period to examine Paleoindian adaptive responses to herd movements and predictability. They infer that the density of kill sites in the Beaver River reflects a shift in hunting strategy during the Clovis-Folsom interval and marks the development of communal hunting tactics on the southern Plains during this time.

Speth provides a lengthy and interesting, but at times somewhat rambling overview of assumptions regarding Paleoindian behavior, some of which is at times hard to relate back to the content of the volume (lithic procurement, technological organization, and mobility) other times is sharply critical and well put (i.e., the undo focus on projectile point manufacture by Paleoindian archaeologists). Packloading, Neanderthals, and a cross-cultural comparison of meat drying both illustrate and distract from the narrative of the chapter.

Overall, the value in this edited volume is the discussion not just of the archaeology of mass kills, but an exploration of the social, economic, logistic, and ritual aspects of large-scale hunting, and the archaeological visibility (or lack thereof) of some of these elements. Relying on both archaeological evidence and ethnographic examples the eight chapters within are aimed at exploring the adaptive costs, benefits, and outcomes of communal hunting on both social, economic, and environmental levels. Ultimately, the value of works such as this is their ability to push forward a dialogue surrounding questions of whether or not mass kills/communal hunting are the cause or outgrowth of social needs/factors. Whether or not we can determine if the chicken or the egg came first will of course be left to future discussions over works such as this.

### **References Cited**

Joe Ben Wheat, Harold E. Malde and Estella B. Leopold (1972) *The Olsen-Chubbuck Site: A Paleo-Indian Bison Kill*. *Memoirs of the Society for American Archaeology*, No. 26.