REVIEW

THE PEOPLE AT THE END OF THE WORLD: THE WESTERN ALEUTIANS PROJECT AND THE ARCHAEOLOGY OF SHEMYA ISLAND

Edited by Debra Corbett, Dixie West, and Chirstine Lefevre, 2010. Aurora, Alaska Anthropological Association Monograph Series no. VIII, Alaska Anthropological Association, Anchorage Paperback, xxii + 297pp., illustrations, bibliography, appendices; ISBN 978-1-89039-608-4

Reviewed by Loukas Barton

Department of Anthropology, University of Pittsburgh, 230 South Bouquet Street, Pittsburgh, PA 15260; loukas@pitt.edu

Like many long-term, multiagency resource reconnaissance programs in remote Alaska, the Western Aleutians Archaeological and Paleobiological Project (WAAPP) blossomed from humble origins to a complex web of interests, agendas, research questions and results. This volume is an excellent attempt to articulate the history of this research and, in so doing, helps to define an ambitious agenda for the prehistory of the Western Aleutians by providing solid footing for subsequent analysis, reporting and future investigation.

In 1991 the WAAPP began by using archaeological data from the Aleutian Islands to establish the population history of Bering Sea seabirds. Soon thereafter the study expanded to the evolution of western Aleut culture and to the natural and anthropogenic dimensions of regional environmental change. Over fourteen years, a multi-dimensional international research cooperative representing seventeen institutions refined and expanded its interests in the western Aleutians, collecting archaeological, paleoecological, and contemporary biological and geological data from the Near Islands (Attu and Shemya), Buldir, and Adak. Though expeditions to other islands were planned, weather and logistics conspired against them.

Deductive purists might gripe that this work began with very little direction. Even the post hoc research design (Chapter 1) lacks logical hypotheses and tightly knit test implications. The authors admit it all began "very basically...from a cultural-historical and cultural-ecological framework" (p. 14). And rightly so—prior to the WAAPP project, next to nothing was known of the region's past. Over time, project members refined a set of

interrelated questions about the colonization, subsistence, settlement, and cultural and environmental changes in the western Aleutians:

- When and from which direction were the western Aleutians initially colonized?
- What are the defining attributes of Near Island Aleut culture and society?
- How and why did the attributes of Near Island Aleut material culture change through time?
- How and why did Near Island Aleut subsistence and settlement change through time?
- How does geographic isolation affect innovation and transmission? And could the Near Islands be the source area of innovations transmitted elsewhere?
- How was social, political, or religious "complexity" expressed in the Near Islands? And to what degree were these expressions introduced from afar?
- Were the Aleuts in contact with the people of Asia?
- How was the evolution of Near Island Aleut culture affected by environmental change? And to what degree did they effect environmental change themselves?
- Finally, how was Near Island Aleut culture affected by the historic introduction of a market economy and its exotic constituents, the fox and the rat?

Few of these questions are addressed directly anywhere in the monograph, which is narrowly devoted to the archaeology of Shemya Island (detailed results from Buldir, Attu, and Rat Islands have been promised for the future). Instead, the authors concede that this publication "is primarily descriptive" (p. 14) rather than "synoptic or theoretical" (p. 209) and that it is "neither a final nor complete

picture" (p. 209) but rather a "first step in addressing and perhaps resolving" (p. 16) some basic archaeological questions. Recurrent disclaimers beg forgiveness for what the monograph does not do and admit to what ought to be done in the future.

Disclaimers aside, the value of this monograph as a professional guide to the western Aleutians cannot be overstated. In this capacity, it succeeds in four general areas: summarizing all that's known of the region's prehistory; introducing a chronological account of historical records from the earliest European mariners through U.S. military operations; compiling ethnohistoric accounts of Aleut life, belief and material culture; and providing a detailed primary account of the geology, ecology and biota that set the stage for Shemya Island's prehistoric record.

First and foremost this is a primary source for the archaeology of Shemya Island. Chapter 10 provides site descriptions, photographs, site maps, excavation profiles, and everything else one might expect from the primary literature. Chapter 11 is a preliminary analysis of the animal remains recovered from Shemya. Chapter 8 discusses prehistoric fishing, harvest pressure, and presumably environmental productivity, while Chapter 9 reports on the evidence for albatross exploitation. Chapter 12 is a descriptive account of the artifacts from Shemya; the descriptions and photos are very useful. Hopefully future studies will provide quantitative, analytical inter- and intra-site comparisons. Chapter 14 ("Eight Unprovenienced Collections") is an excellent attempt to recover some of the information lost through widespread looting of Shemya's cultural heritage at the hands of American servicemen and construction workers.

Secondary, in my view, to the archaeological detail, but essential nevertheless, are the data about the ecology and natural history of the region. Directly relevant to the archaeology of provisioning, mobility, and settlement are the chapters on lithic material sources (Chapter 13, appendices H and I); the physical setting (Chapter 5), which includes a discussion of the geology, geography, and climate of the region; the biology and ecology of Shemya Island specifically (Chapter 7 and appendices A–F); and an attempt to establish a local paleoenvironmental sequence for the Holocene (Chapter 6). Maps and species lists found throughout these chapters are priceless.

Two very different kinds of analysis in this monograph are worthy of emulation in future monographs of coastal archaeology in Alaska: (1) marine reservoir correction, and (2) settlement and catchment analysis.

The culture history of coastal Southwest Alaska is anchored to a decades-old chronology built without regard to a) the offsets of old carbon in the marine reservoir, and b) the offsets of old wood floating around the ocean. This is changing as people become more selective about choosing samples for radiocarbon dating. This monograph is an excellent example, but a few things would make it, and future attempts, better. Though the authors do credit Owen (2002) for the methods used to calculate ΔR (the local offset from the global marine carbon calibration curve), both the current authors and Owen neglect to tell us how they acquire the model marine 14C age ("Q" in Stuiver et al. 1986), which is necessary for calculating ΔR . This omission is commonplace, and though the requisite curves (Stuiver and Braziunas 1993; Stuiver et al. 1998) are often referenced (e.g., Deo et al. 2004; Owen 2002), there is rarely an explanation for how the numbers were acquired. In some cases, variance in the marine model age can lead to variance in ΔR upwards of 100 years or more, violating the standards of good radiocarbon "hygiene" (e.g., Kennett et al. 2008; Spriggs 1989). Aside from this lack of explanation, the authors establish a solid foundation for calibrating the radiocarbon chronology of the western Aleutians.

Another thought-provoking aspect of this monograph is the settlement and catchment analysis. In some ways, this analysis sits uncomfortably in a chapter entitled "Ethnographic Background" (Chapter 3), because it presumes continuity between Attuan speakers of the twentieth century, the Near Island Aleuts encountered during Russian exploration, and those responsible for the late prehistoric patterns recorded by archaeologists, especially since the movements of people through the island chain, and their potential contacts with Asia, are at the core of this project's research agenda.

More problematic is that the settlement and catchment discussion is scattered across four different chapters. At root, settlement pattern analysis provides insight on "social organization that cannot be learned from ethnographic records or . . . archaeological excavations" (p. 26), while site catchment analysis reveals both "human relationships to the land" and "site function" by evaluating acquisition patterns based on resource distributions and the costs of travelling to them (p. 30). In principle, this is an excellent way to visualize human foraging patterns, even if much of the more recent literature on the energetics, optimality, and logic of central-place foraging (e.g., Bettinger et al. 1997; Hollenbach 2009; Morgan 2007) has been completely ignored. Yet the foundation set in Chapter 3

is insightful, and were it presented as a basis for generating testable hypotheses for this and future research (rather than a first stage of the "Ethnographic Background") it would have been far more powerful.

Instead we're asked to follow a rather loose approach to the scientific method for another 200 pages: chapters 7 (and appendices A–F) and 13 provide the spatial distribution, density, and diversity of biological and lithic resources necessary for building testable hypotheses from site catchment models; chapters 10, 11, and 12 provide the archaeological data on site types and locations, along with the fauna and artifacts excavated from them to test the implications of the modeled hypotheses directly for Shemya Island. Together with the Afterword, Chapter 15 provides an assessment of how well the modeled hypotheses explain the data before offering a revised narrative.

Lastly, no one wants to think of the area they work in as "an isolated backwater" (p. 212), nor would anyone like to convey this notion to the inhabitants and descendants of the region. But let's face it, the Near Islands are a long way from anywhere. The cultural record suggests long periods of isolation, hardship, and perhaps novel approaches to pre-existing ways of doing things. For all of these reasons, the area was likely a hotbed of innovation, with adaptations evolving in ways unique to small, segregated groups of people (Barton et al. 2007; Bettinger et al. 2010). Though cultural traditions may be difficult for small groups to maintain (Henrich 2004), novel variation specific to the western Aleutians may well have diffused eastward throughout the Holocene. I suspect future studies will support this.

This volume is a resource critical to anyone interested in the maritime prehistory of the Pacific Rim, the historical ecology of the Aleutian Islands and Bering Sea regions, and the prehistoric ancestry of the Near Island Aleuts.

REFERENCES

Barton, Loukas, P. J. Brantingham, and D. X. Ji 2007 Late Pleistocene Climate Change and Paleolithic Cultural Evolution in Northern China: Implications from the Last Glacial Maximum. In *Late Quaternary Climate Change and Human Adaptation in Arid China*, edited by D. B. Madsen, X. Gao, and F. H. Chen, pp. 105–128. Elsevier, Amsterdam.

Bettinger, Robert L., L. Barton, and C. T. Morgan 2010 The Origins of Food Production in North China: A Different Kind of Agricultural Revolution. *Evolutionary Anthropology* 19:9–21. Bettinger, Robert L., R. Malhi, and H. McCarthy

1997 Central Place Models of Acorn and Mussel Processing. *Journal of Archaeological Science* 24:887–899.

Deo, Jennie N., John O. Stone, and Julie K. Stein

2004 Building Confidence in Shell: Variations in the Marine Reservoir Correction for the Northwest Coast over the Past 3,000 years. *American Antiquity* 69(4):771–786.

Henrich, Joseph

2004 Demography and Cultural Evolution: How Adaptive Cultural Processes Can Produce Maladaptive Losses—The Tasmanian Case. *American Antiquity* 69(2):197–214.

Hollenbach, Kandace D.

2009 Foraging in the Tennessee River Valley: 12,500 to 8,000 years ago. University of Alabama Press, Tuscaloosa, AL.

Kennett, Douglas J., T. W. Stafford, and J. Southon 2008 Standards of Evidence and Paleoindian Demographics. *Proceedings of the National Academy of Sciences* 105(50):E107.

Morgan, Christopher T.

2007 Reconstructing Prehistoric Hunter-Gatherer Foraging Radii: A Case Study from California's Southern Sierra Nevada. *Journal of Archaeological* Science 35(2):247–258.

Owen, Bruce D.

2002 Marine Carbon Reservoir Age Estimates from the Far South Coast of Peru. *Radiocarbon* 44(3):701–708.

Spriggs, Michael

1989 The Dating of the Island Southeast Asian Neolithic: An Attempt at Chronometric Hygiene and Linguistic Correlation. *Antiquity* 63:587–613.

Stuiver, Minze, and Thomas F. Braziunas

1993 Modeling Atmospheric ¹⁴C Influences and ¹⁴C ages of Marine Samples to 10,000 BC. *Radiocarbon* 35(1):137–189.

Stuiver, Minze, G. W. Pearson and T. F. Braziunas

1986 Radiocarbon Age Calibration of Marine Samples Back to 9000 cal yr BP. *Radiocarbon* 28(2B):980–1021.

Stuiver, Minze, P.J. Reimer, E. Bard, J.W. Beck, G.S. Burr, K.A. Hughen, B. Kromer, G. McCormac, J. van der Plicht, and M. Spurk

1998 INTCAL98 Radiocarbon Age Calibration, 24,000–0 cal BP. *Radiocarbon* 40(3):1041–1083.