a ship of the Boston firm of Bryant and Sturgis, which dominated the hide-and-tallow trade at the time, adds to the pertinence of his observations.

While this book makes Dana's observations about California more readily accessible to the general reader, what is presented is simply what Dana had originally published, with no attempt at annotation. This could be frustrating for a scholar who might wish for more insight into the individuals and events mentioned. Such people would be better off to track down the wonderful, highly annotated version of *Two Years Before the Mast* edited by John Haskell Kemble and published in two volumes in 1964. However, footnotes may get in the way of a good yarn for the casual reader. On the other hand, Dana does make a number of historically inaccurate observations that it would be well to set straight instead of leaving the reader with these presented as "facts." Dana should not be relied upon in the parts where he sought to inform the reader on the broader history of California. However, his firsthand, contemporary accounts are very useful. In short, this is a good book for light reading or for obtaining an introduction to this brief two years of California history, but for those wishing to use the information for scholarly purposes, I would recommend that they seek out either a fuller edition or, better yet, the Kemble version. Having said that, I did enjoy this book for rendering Dana's interesting account of life in California in 1834–36 into an easy read rather than a slog.

The Archaeology of the Eastern Nevada Paleoarchaic, Part I: The Sunshine Locality

Charlotte Beck and George T. Jones
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It is clear from even a quick glance at Charlotte Beck and George Jones' new monograph that the Sunshine Locality is a premier Paleoarchaic archaeological resource. Upon a thorough reading, the details assert this at every step via the large amount of data collected, the effort taken to collect it, and extensive geomorphological and technological analyses. The book is crucial to the desk of anyone interested in Paleoarchaic (or "Paleoindian," if you choose) occupations in the Desert West.

This is the first of a two-part effort by the authors to examine Paleoarchaic archaeology in the eastern Great Basin, and thus it is not a comprehensive treatment of regional issues. It is a technical site report. But it is adequate to address most of what is on the minds of interested researchers, especially chronology and technological patterning, and to set up a larger discussion of land use and mobility, which are the authors' stated goals for their yet-to-be-published second part.

As described in Chapter 1, the Sunshine Locality is an expansive multi-site complex of almost 6 km.^{2} associated with the currently ephemeral Sunshine Wash. At the Pleistocene-Holocene transition, this was a perennially wet distributary wetland in south-central Long Valley, Nevada. It is also the foremost site area in the authors' long-term research efforts in eastern Nevada, including summer fieldwork since the mid-1980s in nearby valleys to the south and east.

Chapter 2 presents a detailed discussion of the history of research at the site. This goes back to 1962, with Beck and Jones' involvement beginning in the early 1990s. They do a good job of corralling the spotty reporting and publication history of previous work, a blessing to those of us who know about the Sunshine Locality but have found it difficult to find a suitable description or pin down proper citations.

Of particular note in this chapter is their description of extensive artifact collecting done by avocationalists

Gary Noyes and Phil Hutchinson, which was carried out every year from 1971 to 1978 and continued in limited form into the 1990s. Noyes and Hutchinson were conscientious about archaeological methodology, taking informal direction from Don Tuohy at the Nevada State Museum (to which they donated their collections in 1989). It is interesting to consider their role with regard to the ardent anti-collecting code of modern avocationalism, a subject not broached by Beck and Jones, but it appears that the net effect of Noyes and Hutchinson's effort has been positive. That said, Beck and Jones' broadcasting in the second sentence of their concluding chapter that "many times the number of artifacts that have been collected still remain" is out-of-step with the sensibilities of today's avocational volunteers and the agency archaeologists tasked with protecting cultural resources.

Chapters 3 and 4 provide the archaeological and geomorphological context, centering on the excavations of Beck and Jones and colleagues since 1990. Of primary importance are their attempts, through various backhoe trenching, front-loader scraping, and manual excavations, to find buried living surfaces and dateable features. Proceeding in sequence through their field seasons, they document these trials, with frequent remarks on poor context and tenuous artifact associations. This is no slight, but rather a nod to their determined efforts to extract cultural deposits from an unyielding context, something to which anybody who has troubled over early archaeology in the Great Basin can easily relate. While there are no directly dated archaeological deposits from the Sunshine Locality, Beck and Jones deliver valuable geochronology. For a time frame for which we still have virtually no widely demonstrated chronological trend, even a few thousand years of resolution is noteworthy.

Chapter 4 is a relatively short chapter that synthesizes the locality's stratigraphic and radiometric dating records. Based on the geomorphology, the authors settle on approximately 11,300 to 9,800 B.P. as the time frame of primary occupation. This roughly corresponds with the Younger Dryas climatic period and shortly thereafter when the wash contained a substantial braided stream channel. Their date range ends before the final desiccation of Sunshine Wash and other locales in the region, which occurred between approximately 9,000 and 8,500 B.P.

The monograph shifts to lithic technology in chapters 5 and 6, the former focusing on distributional patterning and various tool types (e.g., bifaces, crescents, scrapers), and the latter on projectile points only. Beck and Jones calculate that almost 8,500 flaked stone tools have been collected over the years at the Sunshine Locality, and their discussion in these two chapters covers 141 of the 241 pages of written text in the report, divided almost equally. I touch on a few of the critical issues here, but the authors provide a formidable analysis that is beyond the scope of this review to discuss in detail.

The Chapter 5 analyses proceed by artifact class, and include discussions of general and class-specific methods, results, functional considerations, and how the Hutchinson and Hoyes samples were used. The Hutchinson and Noyes collections are well-provenienced, but are also biased by their focus on desirable tools, whereas Beck and Jones collected everything (mostly debitage) within surface collection units. There are so many artifacts that this is not a big problem, and they are able to integrate the old collections where sampling is not at issue (e.g., tool form, wear patterns).

A valuable contribution of Beck and Jones' effort is their emphasis on comparing the collection with North American Paleoindian assemblages in general. Crescents are the most locally unique Paleoarchaic stone tools, and the discussion of these is a particularly engaging synthesis of new data and recent analyses by other researchers. With the exception of crescents, there is little in the way of comparison to other regional data, and thus the discussion moves with the implicit assumption that the Sunshine Locality is generally representative of the Great Basin.

Chapter 6 follows similarly, focusing on projectile points. Beck and Jones begin with fluted points, of which 17 of 20 known to have come from the site were available for analysis. Their consideration is a thorough attempt to relate them to fluted point characteristics across North America, especially as defined for Clovis and Folsom. They find that the Sunshine fluted points differ from classic Clovis in several ways and argue that they are "derivatives" that likely date slightly later; few resemble Folsom. This has interesting implications, which they expand on later in the book, as discussed below.

The wholly regional Great Basin Stemmed Series is treated next in Chapter 6. Beck and Jones identify five types—Cougar Mountain, Parman, Lake Mohave, Silver

Lake, and what they term "Ovate." As with fluted points, they are detailed in their examination of quantitative and qualitative attributes in an attempt to tie these diverse types together. Their focus is on reworking as a possible explanation for stemmed point variability. Moving through the data, however, they find little evidence for this, as morphological constraints, a high frequency of broken stems, and resharpening evidence appear to limit the possibilities.

Stemmed types again defy a clean explanation upon functional analysis. Beck and Jones provide use wear and flaking data to suggest that these different types could have had different functions, none of which, however, excludes "projectile point" from being one of them. This is easy to accept, but requires a second look after reading the concluding chapter where the authors hypothesize that stemmed artifacts were supplanted by fluted forms as projectile points. This is discussed further below, but for such a functionally limiting argument, the use wear analysis leaves much to be desired, both in terms of definition and sample size.

Later-period projectile points are uncommon at the locality, with only Pinto and similar indented-base forms receiving extended consideration. The Pinto "problem" is a sticky one where calling out this type means defending the choice against an implicit notion that they are more likely later-dating Gatecliff Split Stem or Elko Eared types. Beck and Jones' treatment reads with this hesitancy to commit, which is unfortunate given the interesting role these points play in the Paleoarchaic story. While they work through relevant literature and various classification keys produced by others to separate the competing types, their analysis comes across as overly abstract when compared to the representative artifacts pictured in figures for the Pinto and Elko series, which are virtually indistinguishable. Many of the pictured Elko items look like quintessential reworked Pinto points from early sites in the Mojave Desert or the nearby Old River Bed in the Great Salt Lake Desert, exhibiting footed or flaring bases and diminished to absent shoulders.

This is important, because Beck and Jones propose 9,800 B.P. as a termination date for primary Paleoarchaic use of the Sunshine Locality. But they also recognize a continued, albeit reduced, wetland presence until 9,000 B.P. During this additional 800 years there was a vast wetland on the Old River Bed, just over 100 miles to the northeast, where Pinto points co-occur in abundance with stemmed points. Obsidian hydration data and lithic resource use patterns strongly support considering them together (see Duke et al. 2007; Duke and Young 2008). Numerous organic sediment dates on the Old River Bed wetland place it between ca. 10,300 and 8,500 B.P., overlapping with primary productivity at the Sunshine Locality and continuing well after the site became dry. Roughly 1,000 stemmed and 200 Pinto points have been collected to date on the Old River Bed, with just a single fluted (Folsom) point and sparse long stemmed points such as those so common to the Sunshine Locality. This lends credibility to Beck and Jones' temporal assignment of primary use, but also suggests that Paleoarchaic occupation between 9,800 and 9,000 B.P. may be underestimated.

Faunal remains are the subject of Chapter 7. None of these remains were found directly associated with cultural materials, but geomorphological relationships are discussed to support the paleoenvironmental interpretation of the site. Much of the discussion is centered on the *Camelops* remains, some of the latest-dating in North America. Dates of just over 11,000 B.P. on the bones combined with a fluted point and other artifacts in the same stratigraphic vicinity suggest that the potential exists for people to have been present in the Great Basin alongside this extinct animal for at least some short period.

The authors close out the book with a summary and discussion of their data. Much of the focus is on site chronology and the relationships between fluted and stemmed point technologies. The interpretations are broad and speculative. Their most compelling argument is that the fluted points at Sunshine, and across much of the Great Basin, constitute a later, descendant form from Clovis. In this hypothesis, stemmed points were first (or perhaps simultaneously) brought into the region, carried by people entering from the Pacific Northwest, while fluted points were brought later by people originating in the northern Plains. The chronological aspect of this appears consistent with the existing, albeit paltry, Great Basin radiocarbon record, and Beck and Jones' morphological analysis of fluted points convincingly distinguishes regional versions from Clovis.

From this they argue that people converged on the region from the Columbia Plateau and began to interact.

They suggest that a reduced emphasis on the use of stemmed bifaces as projectile points occurred, with this functional role being taken up by fluted points in the same technology. Use wear patterns serve as the primary data for this hypothesis, with many stemmed artifacts exhibiting evidence of sawing and cutting, especially Silver Lake types.

It is hard to see why this is a more parsimonious explanation of the existing data. For one, fluted point sites in the Great Basin are small and sparse compared to the extensive stemmed point sites found throughout the region. Secondly, competing lithic resource use patterns and flaking strategies are entailed. Fluted points from the Sunshine Locality are largely made from chert and designed and flaked quite differently than stemmed points and most of the associated tools, which are more often made from fine-grained volcanics and obsidian. Finally, their hypothesis requires an explanation for how to account for projectile points in stemmed assemblages that do not contain fluted points. As mentioned above, one fluted point has been found compared to over 1,200 stemmed and Pinto points on the Old River Bed, which overlaps and largely postdates the Sunshine Locality. Weathering precludes use wear examination of these artifacts, but impact fractures are common, indicating that many were used as projectile points. Beck and Jones do not discuss this important attribute, nor do they provide microphotographs of their use wear patterns. To be fair, they clearly state that they are far from substantiating any of these suggestions, but it is also important to keep in mind how limited the data are before adopting these ideas as the best pathways to understanding Paleoarchaic adaptations.

Ultimately, this monograph is an important contribution to Paleoarchaic research in the Great Basin, particularly with regard to data presentation. There is much here for those interested in this period to compare with their own data sets. It is also well-illustrated, a major strongpoint for such a vital technical piece. It is not clear, however, what Beck and Jones expect from their hypotheses about fluted and stemmed point relationships, which generate more questions than answers. Perhaps this will become clearer in the upcoming second part of their examination of the Paleoarchaic.

REFERENCES

Duke, Daron, Tim Carpenter, and David Page
2007 New Obsidian Hydration Findings Suggest the Use of Split-Stem Points by Great Basin Paleoindians. *Current Research in the Pleistocene* 24:80–82.

Duke, Daron, and D. Craig Young
2008 The UTTR Archaeological Record. In *The Archaeology of Shifting Environments in the Great Salt Lake Desert: A Geoarchaeological Sensitivity Model and Relative Chronology for the Cultural Resources of the US Air Force Utah Test and Training Range*, edited by D. C. Young, pp. 43–72. Far Western Anthropological Research Group, Inc., Davis. Submitted to Hill Air Force Base, Utah.