THE ARCHEOLOGY OF THE WEST MESA AREA
A SUMMARY

by

Matthew F. Schmader
THE ARCHEOLOGY OF THE WEST MESA AREA
A SUMMARY

by

Matthew F. Schmader

Prepared for

National Park Service
Southwest Regional Office
Santa Fe, New Mexico
May 1987
The Archaeology of the West Mesa Area

Albuquerque's West Mesa has been extensively investigated for archaeological materials by at least 20 different projects in the past 35 years. An area defined by the Sandoval County-Bernalillo County line on the north, the Rio Grande on the east, Central Avenue on the south, and the Rio Puerco escarpment on the west has been chosen for the purpose of summarizing the results of these investigations. Within that area, approximately 300 archaeological sites have been recorded that span the full range of man's 12,000 year-long occupation of the southwest.

Several different physiographic zones and landforms delineate natural units within the study area. On the west edge of the mesa, an escarpment of steeply dissected sediments overlooks the floodplain of the Rio Puerco. At the center of the mesa, five volcanoes and at least eleven other smaller vents dominate the horizon. Flat areas of basalt-capped mesa extend from the volcanoes and are broken by the Rio Puerco escarpment on the west and the volcanic escarpment on the east. The volcanic escarpment, which forms the east edge of the West Mesa, overlooks the floodplain of the Rio Grande and the river itself further to the east. The West Mesa is drained by several east-flowing arroyos, or intermittent drainages (Calabacillas, Piedras Marcadas, Boca Negra, San Antonio, Rinconada, Ladera, and Mirehaven Arroyos). West-flowing drainage from the volcanoes to the Rio Puerco escarpment is poorly developed and almost nonexistent; the presence of ancient lake beds is evidence of this fact.

The western edge of the West Mesa is clearly defined by the Rio Puerco escarpment, a landform that contains a high density of archaeological sites. These sites command an excellent view of the Rio Puerco valley below and to the west of the highly dissected mesa edge. Immediately below the escarpment, these dissected sediments contain numerous varieties of workable materials from which stone tools can be made. The combination of the view and the readily available raw material source has made the Rio Puerco escarpment a repeatedly used area for millennia. Evidence for human groups using the escarpment clearly dates back to PaleoIndian times, and Archaic use of the area was heavy. Sites from other time periods are also represented, but not with the frequency (nearly 50%) that apparent Archaic occupation had attained. This may in part be related to decreasing strategies of group mobility during Basketmaker or Puebloan times, but the abundance of what has been identified as "Archaic" sites certainly arises from estimated dates that archaeologists have given sites. For example, sites that have datable pottery types will be assigned to certain time periods, but sites without ceramics are generally thought to be Archaic.
Multicomponent sites, which have been reused by a number of groups through time, will usually be classified as Archaic in the absence of diagnostic stone tools. The presence of Archaic stone tool types may also be the only definite time markers for sites that have been continually reused.

The area between the Rio Puerco escarpment and the volcanoes is poorly drained and contains a number of dessicated playas, or ancient lake beds. These locations were favored by early hunting groups stalking prey as they used the water sources. Accordingly, the most frequent appearance of otherwise rare PaleoIndian sites is related to the exploitation of ancient playa shorelines. Although this area is relatively incompletely surveyed, by far the greatest number of recorded PaleoIndian sites are reported in the vicinity. A contributing factor in the identification of PaleoIndian sites is the degree of erosion or deflation that has occurred on the West Mesa, a situation that results in greater visibility of the oldest sites. Archaic use of the area is also substantial, with nearly 40% of the located sites dating to that time period.

The volcanoes are a dominating set of features on the mesa top, and can be expected to have been the location of activity over a long time. Although PaleoIndian and Archaic use of the volcanoes area is present, the most notable utilization is related to historic activities such as herding. Over one-third of the sites found near the volcanoes are historic. One of the most important sites on the West Mesa, Boca Negra Cave (LA 46432), is located on Bond Volcano. This site is not only significant because it is one of a handful of local excavated sites, but because it contains evidence for the transition between Archaic adaptations and emergent Puebloan adaptations that were beginning to rely on agriculture. A long continuum of cultural development is represented at Boca Negra Cave, particularly Basketmaker materials, and the site has been placed on the National Register of Historic Places.

Between the volcanoes and the east edge of the West Mesa, intermittent drainages seem to have the focus of past activity. In particular, three "geologic windows" or deep cuts into the mesa's geologic strata along arroyos offer important changes in topography and habitat. Interestingly, there are almost no PaleoIndian or Archaic sites, which may be a visibility problem in zones of soil accumulation. The predominant use of this area occurred during Pueblo IV times (over one-fourth of the sites) and again with the appearance of historic herding sites (over 40% of these sites).

The volcanic escarpment that forms the east edge of the West Mesa has been the center of intensive human usage. Along with millions of basalt boulders, the sandy sediments underlying the escarpment serve as a
mechanism for catching and retaining surface runoff from the mesa above. The result is a uniquely rich habitat in terms of natural stands of vegetation and the wildlife that can be supported. Thousands of petroglyphs adorn the boulder surfaces, and the habitats were enhanced in order to increase wild plant production and to grow domesticates as well. The richness and variety of sites along the volcanic escarpment have been recognized by the area being placed on the National Register of Historic Districts. Use of the escarpment area seems to have first hit a peak during Pueblo IV times, when expansion of the subsistence/agricultural base included it, and when many of the petroglyphs were created. Historic utilization again is most evident in the form of herding camps or trash dumps, particularly at the south end of the escarpment. Over 60% of the recorded sites are either Pueblo IV or historic.

East of and below the volcanic escarpment, the Rio Grande floodplain also contains a moderately high density of sites. Over one-third of these have not been assigned to a specific prehistoric time period, since many sites are gravel terrace raw material sources for making stone tools. The terraces have probably been used by a variety of groups over a long period of time, but in the absence of any diagnostic artifacts, they can only be described as "prehistoric." Over 20% of the dated sites are described as being Archaic, but it is likely that most should merely be classified as prehistoric also. Direct evidence for Archaic usage of the floodplain is rather scarce. More than one-fourth of the sites date to the Pueblo IV period, which is expectable given the presence of some very large pueblo villages along the river. In particular, LA 290 (the Zuris-Mann Site) is estimated to contain about 1000 rooms and was clearly the center of a great amount of activity. The large number of sites datable as Pueblo IV probably represent the daily activities of groups using the area around the pueblo. Nearly 80% of all Pueblo IV sites found on the West Mesa are located on the mesa east of the volcanoes, along the escarpment, or in the floodplain.

Collectively, the archaeological data base from the West Mesa forms a rich source for interpreting local cultural evolution. Large areas (over 17,000 acres) have been surveyed, and many sites have been recorded. Although the area has been researched for over 35 years, most of the extensive survey coverage has taken place in the past 12 years. Even within that time, techniques of surveying and site recording have changed enough to warrant reinvestigation of some areas. Several large survey areas that were apparently intensively surveyed were in fact only sampled or partially surveyed; this is especially true for nearly all work that has been done west of the volcanoes. Important areas on top of the mesa, both east and west of the volcanoes, remain to be inventoried. Large areas in the Town
of Alameda and the Town of Atrisco Grants have never been investigated. Very few sites have been partially excavated, let alone fully excavated. Even with the amount of work that has been done, it is clear that much more work needs to be done in order to reaffirm or refute the interpretations of culture history that have emerged from the West Mesa. It is undeniable, however, that the West Mesa contains extremely rich and valuable information about the entire range of history and prehistory not only of the local area, but of the entire southwestern region of the country. In particular, the presence of sites from all major time periods over the past 12,000 years represents an opportunity to study the changes that have occurred and a resource that can be examined to find answers to the causes of those changes.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Rio Puerco</th>
<th>Mesa Escarp</th>
<th>Volcanic</th>
<th>Mesa Top</th>
<th>Volcanic Top</th>
<th>Floodplain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Prehistoric</td>
<td>16</td>
<td>2</td>
<td>6</td>
<td>14</td>
<td>21</td>
<td>20</td>
<td>79</td>
</tr>
<tr>
<td>PaleoIndian</td>
<td>1</td>
<td>10*</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Archaic</td>
<td>34</td>
<td>20</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>13</td>
<td>76</td>
</tr>
<tr>
<td>Basketmaker II</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Basketmaker III</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Puebloan</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Pueblo I</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Pueblo II</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Pueblo III</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Pueblo IV</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>16</td>
<td>23</td>
<td>16</td>
<td>72</td>
</tr>
<tr>
<td>Pueblo V</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Historic</td>
<td>7</td>
<td>5</td>
<td>16</td>
<td>24</td>
<td>20</td>
<td>5</td>
<td>77</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>77</strong></td>
<td><strong>54</strong></td>
<td><strong>47</strong></td>
<td><strong>57</strong></td>
<td><strong>76</strong></td>
<td><strong>59</strong></td>
<td><strong>370</strong></td>
</tr>
</tbody>
</table>

*-- Nine sites are from Judge's surveys; surveyed areas and exact site locations not known.

Note-- the grand total of 370 represents the number of cultural components that were found on all sites, not the actual number of sites found.
National Park Service
Feasibility Study

REFERENCES

Beal, John D.
1976  An Archaeological Survey of "The Volcanoes" West of Albuquerque, New Mexico. The School of American Research Archaeology Division. Santa Fe.

Campbell, John Martin, and Florence Hawley Ellis

City of Albuquerque

Clifton, Don
1985  An Archaeological Survey of the Proposed Paseo del Norte, Albuquerque, NM. New Mexico State Highway Department, Santa Fe.

Harlan, Mark E.

Johnson, Carl B.

Mann, Thomas and Associates

Neal, William R.
National Park Service
Feasibility Study

Ward, Albert E.


Whitmore, Jane
1978 *An Archaeological Reconnaissance Survey of "The Volcanoes" Area West of Albuquerque, New Mexico.* School of American Research Archaeology Division, Santa Fe.