

Excavations at Three Early  
Navajo Sites in the La Plata Valley

by

Alan C. Reed  
Patricia M. Hancock  
Timothy M. Kearns  
Margaret A. Powers  
Roger A. Moore

DIVISION OF CONSERVATION ARCHAEOLOGY

Studies in Archaeology No. 7

May 25, 1988

## TABLE OF CONTENTS

	Page
CHAPTER 1 INTRODUCTION . . . . .	1
Project Background by Margaret A. Powers . . . . .	1
Environment of La Plata Mine . . . . .	1
Geology . . . . .	3
Research Problems and Methods by Margaret A. Powers . . . . .	7
Prior Work . . . . .	7
Research Problems . . . . .	8
Other Research Considerations . . . . .	10
Problem Domains and the Structure of Research by Timothy M. Kearns . . . . .	11
Data Recovery Methods by Timothy M. Kearns . . . . .	14
Ceramic Methods by Patricia M. Hancock . . . . .	15
Puebloan Ceramics . . . . .	15
Protohistoric and Historic . . . . .	16
Paleobotanical Methods and Ethnobotanical Usage by Alan C. Reed . . . . .	17
Seed Collection . . . . .	18
CHAPTER 2 DCA-86-79 by Patricia M. Hancock . . . . .	24
Introduction . . . . .	24
Field Methods . . . . .	24
Results . . . . .	27
Feature Description . . . . .	27
Dating . . . . .	37
Summary . . . . .	45
CHAPTER 3 DCA-86-80 by Patricia M. Hancock . . . . .	47
Introduction . . . . .	47
Field Methods . . . . .	47
Organization of Discussion . . . . .	48
Results . . . . .	48
Cluster Descriptions . . . . .	48
Site Summary . . . . .	98
CHAPTER 4 DCA-86-81 by Alan C. Reed . . . . .	99
Introduction . . . . .	99
Field Methods . . . . .	99
Stratigraphy . . . . .	99
Results . . . . .	102
Cluster Descriptions . . . . .	102

## TABLE OF CONTENT

	Page
CHAPTER 5 LITHIC ARTIFACTS by Timothy M. Kearns . . . . .	154
Introduction . . . . .	154
Lithic Analysis Format . . . . .	155
Materials . . . . .	159
Stone Implements . . . . .	173
Cores . . . . .	174
Chopper-Planes . . . . .	199
Angular-Abraders . . . . .	204
Groundstone Implements . . . . .	247
Debitage . . . . .	254
Concluding Remarks . . . . .	264
CHAPTER 6 SYNTHESIS . . . . .	352
Dating by Margaret A. Powers . . . . .	352
Tree-Ring Dating . . . . .	352
Radiocarbon Dating . . . . .	352
Thermoluminescence Dating . . . . .	353
Obsidian Hydration . . . . .	354
Ceramics by Patricia M. Hancock . . . . .	357
Patterns of Features and Artifact Concentrations by Alan C. Reed . . . . .	360
Type 1 Sites . . . . .	361
Type 2 Sites . . . . .	362
Types 1 and 2 Summary . . . . .	363
Type 3 Sites . . . . .	363
Type 4 Sites . . . . .	363
Type 4 Summary . . . . .	368
Concluding Remarks . . . . .	368
Internal Patterns of Protohistoric Structures by Patricia M. Hancock . . . . .	368
BIBLIOGRPAHY . . . . .	378
APPENDIX A	
APPENDIX B	
APPENDIX C	
APPENDIX D	

## CHAPTER 2

DCA-86-79

by Patricia M. Hancock

### Introduction

DCA-86-79 is a Dinetah Phase (A.D. 1550 to 1680) temporary camp. It has been divided into four clusters based on artifact densities. Cluster 1 was on the western edge of the site and contains the burned remains of a structure, Feature 1. Cluster 2 was northeast of Cluster 1 and was a hearth with a small work area. Both of these clusters have absolute dates from the Dinetah Phase. Clusters 3 and 4 were to the east and represent small lithic work areas. The total site area was 28m north/south by 90m east/west (Figure 2-1).

The site was on a gentle ridge slope near the head of a small drainage which flows northeast into a major tributary of Cinder Gulch. Cinder Gulch is 1.2km to the east and the La Plata River is 3.7km to the west. The soil, a reddish-brown clayey silt, was generally shallow and in places was littered with small pieces of exfoliating sandstone bedrock. The site was within a pinyon/juniper woodland at an elevation of between 6055 and 6085 ft above sea level.

### Field Methods

The site was mapped. All surface artifacts were collected by point provenience or by 1 x 1m grids as in the Feature 1 area. Feature 1 was excavated and the surrounding area was surface stripped. This resulted in the discovery of Feature 1-C. Radiocarbon, pollen, and flotation samples were extracted from Features 1 and 1-C. Two thermoluminescence (TL) sherd samples were taken from the Feature 1 area. A piece of oxidized sandstone from Feature 1-C was also collected for TL dating.

Obsidian hydration samples were gathered from south and east of Feature 1 on the surface.

A 0.50 x 2m trench (Test Trench #4) was placed in Feature 2. The trench was dug in arbitrary levels to a maximum depth of 20cm below the surface. Shovel holes were also placed in Cluster 2. When ash and charcoal were encountered, a roughly 3 x 3m area was surface scraped to a depth of 2-10cm below the surface in order to expose the outline of the feature. The feature was then excavated. A radiocarbon sample was taken.

Test Area #6, northwest of Cluster 4, included seven shovel holes, varying in depth from 10-25cm below the surface. The soil from the holes was not screened but was visually inspected for artifacts and charcoal. No cultural material was recovered.

A 1m<sup>2</sup> test pit (Test Trench #5) was placed in Cluster 4 to determine if there was any depth to the feature. The test pit was terminated 5cm below the surface.

manufacturing, biface reduction, and large tool resharpening. The large percentage of angular debris and unknown flake types also suggest that tool manufacturing and maintenance were main activities. The only flaked tool was a drill which indicates that perforating tasks were performed here.

#### Cluster 5

A Cluster 5 is listed on all the lithic tables. It was not an actual concentration but rather artifacts which were not within the boundaries of the four discrete clusters. A total of nine items were included (Tables 2-3 to 2-5).

#### Summary

In summary, DCA-86-79 is a Dinetah Phase temporary camp which contained four clusters. Two dating to the Dinetah Phase and two which could not be positively dated. Cluster 1 contained a structure and the majority of artifacts. Cluster 2 appeared to be a small discrete activity area. A re-occupation may have occurred at the exterior hearth at Cluster 1 and at Cluster 2. Clusters 3 and 4 were undated lithic scatters believed to be contemporaneous with Clusters 1 and 2.

Trade or mobility was suggested by lithic items from the Jemez-Abiquiu District and corn pollen and corn cobs. No other indications of farming were noted at the site so the presence of corn could indicate that the inhabitants either grew their own corn somewhere in the vicinity, or transported the corn to the site from another location. Whether this corn production was from their own labor or traded for is not known.

The main form of subsistence activity appears to be hunting and gathering as indicated by the lithic assemblage and floral samples.

Ceramics recovered at the site have been given the name Dinetah Gray (La Plata Variety) because they resemble Dinetah Gray in all aspects except they date before the generally accepted dates of Dinetah Gray. Sooted sherds indicated that ceramic vessels were used for cooking. Other functions may have been water and food storage and transportation.

The majority of lithic materials came from the general La Plata area.

Seasonality of the Cluster 1 area can only be inferred. The southeast placement of the entranceway at the structure suggests a fall/winter occupation, this fact coupled with the large number of scrapers in the lithic assemblage suggests a winter hunting camp. The flotation and pollen record indicate that wild plants were processed at the site. This implies a summer/fall site use or storage of these items.

## CHAPTER 3

DCA-86-80

by Patricia M. Hancock

Introduction

DCA-86-80 is a multicomponent site containing an Archaic component (Clusters 4, 6, and 19) evidence of Pueblo II-III use (surface artifacts in Clusters 1, 2 and 18), a Dinetah Phase component (Clusters 6, 10, 12, 15, 20, and 21), and nondiagnostic lithic clusters (Clusters 3, 7, and 14).

Clusters 8, 9, 13, 16, and 22 contained no subsurface cultural material. Cluster 17 was a tree stump which could not be dated. Clusters 5 and 11 became part of Clusters 4 and 10 respectively. The site measured 105m north/south by 185m east/west.

The site was within the pinyon/juniper woodland at an elevation of 6160 to 6175 feet. Cinder Gulch was 2.7km to the east and the La Plata River 2.1km to the west.

The site was situated in a highly eroded and dissected area. Numerous small drainages traverse the site which slopes to the south. The area directly north was relatively flat and had been chained; the area to the south was flat and contained numerous grasses. The dominant vegetation was juniper trees surrounded by low raised areas. The soils was generally shallow except near the trees. The soil consisted of a reddish sandy loam which overlay a yellow sandy silt. A gray shale was noted in several drainages below the sandy silt.

Field Methods

Surface artifacts were pin flagged area by walking narrow north-south transects approximately 3m apart across the site. This procedure resulted in an increase in the number of artifacts originally reported and isolated an artifact cluster on the western boundary (Cluster 1). All surface artifacts except those in Test Unit 6 (see below) were point provenienced and collected.

Based on surface artifact distribution or on the presence of fire-cracked rock, oxidized sandstone, or ash, 18 areas were tested for subsurface cultural material. This resulted in the isolation of six feature areas which were then expanded (Clusters 4, 6, 10, 12, 15, and 19). Test units were 50cm wide and were the length of the surface indication. Each unit was excavated to sterile soils usually 10cm below the ground surface. Testing and mitigation procedures are detailed below for each individual feature. All feature areas were photographed, mapped, profiled, and sampled. All dirt was screened in a 1/4" screen.

### Site Summary

In summary, Cluster 2 was multicomponent with features and artifacts representing the Archaic, Basketmaker II-III, Puebloan, and Protohistoric Navajo periods. The Protohistoric Navajo component was the most highly represented.

The site as a whole witnessed the full complement of Southwestern cultural affiliations: the middle and late Archaic; the Puebloan, and the Protohistoric. The Protohistoric period saw the most intense use. Clusters 10, 12, and 15 were believed to be Navajo and contemporaneous based on absolute dates and the high percentage of lithic materials from the Jemez-Abiquiu District. Cluster 6 while varying in lithic materials, has absolute dates of the same time period.

## CHAPTER 4

DCA-86-81

by Alan C. Reed

Introduction

DCA-86-81 (Figure 4-1) was composed primarily of a series of protohistoric (early Navajo) encampments spanning a time range from the mid 1300s to mid 1700s, with the heaviest periods of use during the 1500s. This interpretation is based upon ceramics and various chronometric dating techniques. A sparse scattering of Pueblo II-III ceramics, indicated occasional use of the area during the prehistoric period. Cluster 3 (Feature 2) contained the only evidence of a temporary Puebloan (Pueblo III) encampment. With the exception of this feature, the small number of Anasazi ceramics found in association with protohistoric features were considered to be either isolated occurrences or items curated by the protohistoric occupants. Some stone projectile points were also probably curated items from earlier cultural periods. One isolated aceramic cluster (Cluster 14) some distance west and northwest of the main site area dated to the Basketmaker II period. No evidence of protohistoric activity was found within or near Cluster 14.

Field Methods

Surface artifacts were pin flagged across the site by walking narrow north-south transects approximately 3m apart. This procedure resulted in an increase in the number of artifacts and features as originally reported, and an expansion of the site's boundary. A datum for mapping and subsurface excavation was established. Subdata locations were established for test areas, clusters, and features. All surface artifacts were point provenienced and collected.

Based on artifact distribution, topography, and other surface evidence, sixteen areas were tested for subsurface cultural deposits, resulting in the isolation of sixteen cluster areas. Features were encountered in fourteen of these areas. Initially 1m x 50cm grids were excavated to define each cluster and its lateral extent, with grids excavated to sterile in 5-10cm arbitrary levels to define stratigraphy and cultural depth. After feature delineation, grids were expanded to 1 x 1m units and additional grids excavated. All features were mapped, photographed, described, profiled, and sampled. All dirt was screened through a 1/4" screen and in certain instances a 1/8" screen.

## Stratigraphy

In general, the site stratigraphy was uncomplicated. With the exception of eroded areas, large portions were covered with an upper deposit of loosely consolidated aeolian/colluvial soil. It was mostly a reddish-brown silty sandy loam with some variation in the sand and clay content. This uppermost unit (Stratum I) contained differing amounts of decomposing vegetative matter