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AN ARCHAEOLOGICAL SURVEY OF NORTH COTTONWOOD CANYON,
SAN JUAN COUNTY, SOUTHEASTERN UTAH

Presented by the Department of Anthropology and Archaeology of Brigham Young University as satisfying the thesis requirement for the degree of Master of Arts.

Ray T. Matheny
Ray T. Matheny, Committee Chairman

A Thesis

Presented to the

Department of Anthropology and Archaeology

Brigham Young University

Martin G. Myers
Martin G. Myers, Minor Committee Member

8/15/74
Date

Martin G. Myers
Martin G. Myers, Department Chairman

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

L. 2

by

Larry D. Davis

April 1975

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BRIGHAM YOUNG UNIVERSITY

This thesis, by Larry D. Davis, is accepted in its present form by the Department of Anthropology and Archaeology of Brigham Young University as satisfying the thesis requirement for the degree of Master of Arts.

Ray T. Matheny, Committee Chairman

Dale L. Berge, Committee Member

Merlin G. Myers, Minor Committee Member

8/15/74
Date

Merlin G. Myers, Department Chairman

PREFACE

The material reported in this thesis is based on work that began in August, 1968, when the author participated in a survey under the direction of Dr. Ray T. Matheny, Associate Professor from the Department of Anthropology and Archaeology at Brigham Young University, prior to a chaining project by the Bureau of Land Management.

As with any study such as this, much help is recruited and is received most appreciatively. A special thanks goes to my wife Judi for her continued interest, help, and encouragement. It never dimmed, even through some of the worst wind and rain storms imaginable. She was with me at every site in the canyon that was recorded. Most of the time she carried a pack and helped me with the necessary notes and has been responsible for the typing of this final manuscript. Without her, this study would not be complete.

Appreciation is expressed to those various students in the Department of Anthropology and Archaeology at B.Y.U. for their help in the survey of the canyon. Included are Darlene Glauner, T. Michael Smith, Grace Stitely, and Elizabeth Sartori.

A special thanks is conveyed to members of my family--Mom, Dad, and my brother Roger--for their encouragement and interest in the project, for their help in the survey, and for the use of their four-wheel drive vehicle which facilitated much of the survey.

I appreciate the co-operation of the personnel at the Monticello district offices of the Bureau of Land Management and U. S. Forest Service. Also to Jim Walker, photographer from B.Y.U., and Dee Green,

archaeologist for the U. S. Forest Service, a sincere thanks is given for a tremendous aid in the photography of 42Sa1829 and help with interpreting cultural material from the canyon.

A special thanks goes to B. J. Earle for her drawings of the artifacts found during the survey. Her talent is appreciated.

Robert Redd, owner of the Dugout Ranch at the mouth of the canyon, deserves a special thanks for permission to survey on property he owns within the canyon, as well as for the information given to us concerning possible sites and also history of the area. Also for his graciousness in letting us use the Wilson Ranch cabin as our headquarters during the survey.

I appreciate also the suggestions, criticism, and encouragement from Drs. Matheny, Dale Berge, and Merlin Myers, members of my graduate committee.

Thanks also to my parents-in-law, Mr. and Mrs. Max Jones, for their encouragement and support in this project. Use of their tape recorder and typewriter was a great help in doing the survey work and preparing the report.

As is always the case when one starts to issue appreciation, he forgets someone. To those who helped in any way with the completion of this study, thank you.

CEDAR MESA 19

4. SITE DESCRIPTIONS 20

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42SA1801 22

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It may be my optimistic or conciliatory nature, but I think these steps have been logical. Given human fallibility, I am not sure we could have planned it better. Now, in a sense, things have come full circle. The old spirit of speculation, held in check, to be sure, by professional discipline, is once again with us. We are ready to wonder, speculate, and ask questions once more. This time they should be better questions: at least, we hope so (Willey 1968:53).

Archaeologists through the years have developed new techniques and are using those developed by other sciences and disciplines to squeeze as much information as possible from the material remains uncovered through controlled excavation and study of materials.

One of the most difficult problems in archaeology is the establishing of a workable chronology or classification system so that a cultural area may be broken down into various parts to be studied and compared. Three factors to be taken into consideration in establishing such a classification are time, space, and culture, or, more specifically, the temporal, spatial, and cultural factors (McGregor 1965:62).

One of the first classifications organized for use in the

Chapter 1

INTRODUCTION

Southwestern archaeology, in a little over one hundred years, has come from a very uncontrolled speculation about the past, through a period of collecting and classifying, through another of chronological ordering, and now is trying to explain and to understand the past. That these steps were logical is indicated in the following:

It may be my optimistic or conciliatory nature, but I think these steps have been logical. Given human fallibility, I am not sure we could have planned it better. Now, in a sense, things have come full circle. The old spirit of speculation, held in checkrein, to be sure, by professional discipline, is once again with us. We are ready to wonder, speculate, and ask questions once more. This time they should be better questions: at least, we hope so (Willey 1968:53).

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One of the first classifications organized for use in the

Southwest, and the one used in this paper, was established in 1927 when a group of archaeologists met in Pecos, New Mexico. At this conference, a general cultural classification was proposed and generally accepted. It was made up of stages which, in the most general manner, formed a sequential development. It was not originally intended as a division of Southwestern prehistory into time periods, although the terms and the order of divisions have persisted.

The Pecos Classification as presented below has been revised from the original as summarized by Kidder in Science, Vol. 66, No. 1716, by the addition of features which John C. McGregor found most useful. The additions largely consist of pottery types and characteristics. Dates have been added to the periods in order to give the reader a clear understanding of their relationship with one another through time.

- | | |
|--------------------|---|
| ? - Pre A. D. 1 | Basket Maker I or Early Basket Maker. A postulated state, pre-agricultural, yet adumbrating later developments. |
| A.D. 0 - 450 | Basket Maker II or Basket Maker. The agricultural, atlatl-using, non-pottery-making stage, as described in many publications. |
| A.D. 450 - 700-750 | Basket Maker III or Late Basket Maker or Post Basket Maker. The pit-or slab-house-building, pottery-making stage (the three Basket Maker stages were characterized by a long-headed population which did not practice skull deformation). Pottery is characterized in general by coarse lines, simple designs, many basket designs, and some crude life forms, generally a relatively coarse paste, and globular forms. |
| A.D. 700-750 - 900 | Pueblo I or Proto-Pueblo. The first stage during which cranial deformation was practiced, vessel neck corrugation was introduced, and villages composed of rectangular rooms of true masonry were developed (in some areas). It was generally agreed that the term pre-Pueblo, |

A.D. 900 - 1100

hitherto sometimes applied to this period, should be discontinued. Introduction of slips on pottery, burnishing, designs characterized in general by very fine lines, attached dots, and high triangles in the black-on-white types.

Pueblo II. The stage marked by widespread geographical extension of life in small villages; corrugation, often of elaborate technique, extended over the whole surface of cooking vessels. Black-on-white pottery types characterized in general by simple designs in wide lines, long flattened triangles with occasional attached dots, and rudimentary interlocking frets.

A.D. 1100 - 1300

Pueblo III or Great Period. The stage of large communities, great development of the arts, and growth of intensive local specialization. The first introduction of polychrome types of pottery and a general marked decrease in the importance of corrugated types.

A.D. 1300 - 1600

Pueblo IV or Protohistoric. The stage characterized by constriction of the area occupied; by the gradual disappearance of corrugated wares; and, in general, by decline from the preceding cultural peak. In many instances the implied cultural decline is not strictly true. Widespread use of polychrome pottery and the introduction of glazed paints.

A.D. 1600 - Present

Pueblo V or Historic. The period from A.D. 1600 to the present (McGregor 1965:63, 69).

While these neat divisions may appear almost arbitrary, they are supported by considerable data. It should also be remembered that they are not of the same length nor do they cover the same time spans throughout the Southwest (Jennings 1966:33). Neither did each sequential stage show up throughout the Anasazi cultural area.

The original problem to be solved by a survey of North Cottonwood Canyon concerned the possibility of culture contact in the canyon between the San Rafael Fremont culture to the north and the Anasazi culture to the south and east. Because of the very limited Fremont

indications that showed up during the survey, it was decided to set that portion of the study aside for the present until a more thorough study, including excavation of a number of chosen sites, can be made.

I realize that the "one man Scholar" approach to archaeology and the small scale of the project undertaken is very inadequate to thoroughly investigate the nature of the problem as it should be handled. It is not the intent of this study to attempt to solve all of the problems and answer all of the questions that show up during an archaeological survey of a given area. I simply attempt to answer those questions that the physical evidence allows and in doing so will undoubtedly pose more questions and problems that might be answered. Many of the answers will come about only through controlled excavation and study of the material remains, site distribution, climate, availability of foodstuffs, and any other study relating to human habitation of an area.

It is hoped that the material presented in this thesis will lay the foundation for future, more detailed work that might be done in the canyon.

The canyon is described physically, after which the sites recorded and archaeological materials found are described and discussed. This is followed by a distributional analysis of prehistoric sites within the canyon. The study concludes with a discussion of economy that includes the probable lifeway of the prehistoric inhabitants.

Cottonwood Canyon was surveyed on foot by the author and his wife and other help when it was available. The idea was to find and record as many sites as possible during the site survey and to collect artifacts from the surface of these sites. If these surface collections

showed anything out of the ordinary, this site would then be tested by way of partial excavation. When possible, all cultural material was gathered from the surface of the site. In the case of a few large sites, the large quantity of surface materials available made it impractical as well as impossible to collect all surface materials.

With few exceptions, all of the sites recorded in the canyon showed evidence of having been visited by the "pot-hunter". Most showed considerable damage by uncontrolled digging and in some cases the actual pushing over of walls in order to facilitate the vandalism of a particular site. Site 42Sa1801, because of its apparent accessibility, especially shows the rigors of continued vandalism.

All sites were recorded on a standard University of Utah, Department of Anthropology, Site Survey Sheet. All pertinent data were placed on this form. Additional information was recorded on a tape recorder and transcribed at a later time. When possible, measurements and photographs were taken and recorded. The largest portion of the photographs are in black and white, although a limited number of photos were taken in color and reproduced in color slides. All photos were given a title, identified as to site number and description, date taken by whom, and assigned an identification number. Negatives received corresponding identification. All photos, negatives, notes, and cultural material are deposited at Brigham Young University, Department of Anthropology and Archaeology, with the exception of that material found on private ground, which was returned to the landowner.

Site locations were marked on 9 in x 9 in aerial photographs of the canyon and later transferred to the site location map. Frosted acetate placed over these photos made it possible to mark locations

without permanently damaging or marking them.

Work was done under two permits issued by the U. S. Department of the Interior. Permission was also obtained from the State office as well as the Monticello district office of the Bureau of Land Management. Both permits were issued to the Department of Anthropology and Archaeology of Brigham Young University. The first permit was issued February 28, 1969, and was valid during the 1969-71 calendar years. The second permit, #72-Ut-108, was valid during the period between May 1, 1972, through April 30, 1974.

Two sites, 42Sa1816 and 1827, were found on lands administered by the U. S. Forest Service. A copy of this report will be forwarded to them in order to aid them in adding to their inventory of archaeological sites.

The site numbers used in this report were assigned by Dr. Matheny and were obtained from the University of Utah, Department of Anthropology, in accordance with the Utah Statewide Archaeological Survey. The block of numbers assigned were numbered from 42Sa1800 through 42Sa1862. Only numbers 42Sa1800 through 42Sa1835 were used during the survey.

the form of summer thundershowers and winter snows in the higher elevations.

Chapter 2

The area included in this survey is from the junction of Hop Creek with North Cottonwood Creek to the old Forest Service guard station, north to the mouth of the canyon at the Dugout Ranch. Most sites are located in the upper portion of the canyon from the Wilson Ranch.

GEOGRAPHY

PHYSIOGRAPHY

North Cottonwood Canyon is located in the northwestern portion of San Juan County 16 airline miles west of Monticello. It can be reached by car by taking the Canyonlands National Park turnoff at Church Rock, 10½ mi north of Monticello, and 16½ mi south of LaSal Junction on U. S. Highway 163. The mouth of the canyon begins at the Dugout Ranch from the junction on State Highway 211. The canyon and the stream running the length of the canyon are designated by the name Cottonwood. Locally and in this study, however, they are referred to as North Cottonwood Creek and Canyon to differentiate between Cottonwood Canyon to the south.

The canyon is bounded on the west by Bridger Jack Mesa, Salt Creek, Beef Basin and the Colorado River. To the south it is bounded by the Manti-LaSal Forest, including the Abajo or Blue Mountains. Abajo peak at 11,360 ft elevation is the highest, and most of the adjacent peaks are above 9,000 ft. To the northwest the canyon is bounded by Canyonlands National Park. North Cottonwood Creek runs northeast from its head on the Blue Mountains at an elevation of 8,000 ft and joins Indian Creek at the mouth of the canyon near Dugout Ranch at an elevation of 5,300 ft.

The annual precipitation in the canyon is 10-16 in, usually in

the form of summer thundershowers and winter snows in the higher elevations.

The area included in this survey is from the junction of Hop Creek with North Cottonwood Creek near the old Forest Service guard station, north to the mouth of the canyon at the Dugout Ranch. Most sites are located in the upper portion of the canyon from the Wilson Ranch up to the guard station. This could be due to the access to the cliffs for the construction of storage granaries, as the formation dips as one travels toward the mouth of the canyon, and there are not the suitable cliffs and overhangs in the lower reaches of the canyon that appear in the upper portion. There is, however, one large site near the mouth of the canyon (42Sa1829). It is the only site recorded in that portion of the canyon and takes advantage of a large cliff overhang and flat area at the top of the talus slope. Evidence also indicates that there was probably a seep spring near the site that provided water to the inhabitants. If this were not the case during habitation of the site, water would have had to have been carried from the creek up to the site and stored in water jars. This would have been a very hard and tiring job.

The canyon has experienced a great deal of erosion during the past years, judging from the amount of alluvium deposited in the canyon bottom, and the arroyos that have been cut into the floor of the canyon and side canyons (Fig. 1). This has been demonstrated quite dramatically at an abandoned ranch located south of the Wilson Ranch at the mouth of Stevens Canyon. This ranch has been inundated by flood waters in the past that have left approximately four feet of alluvium around the main building. This same action may have also covered any

archaeological sites that were located on the valley floor. Most sites found and recorded in the canyon were found above the valley floor on the higher points in the canyon and at the heads of talus slopes on the west side of the canyon where the canyon walls are highest.

Summer thunderstorms as well as spring runoff from melting snows cause erosion of the higher elevations in the canyon, depositing this soil in the canyon bottom. This deposition is evidenced by the great amount of alluvium that can be seen in the walls of the deep

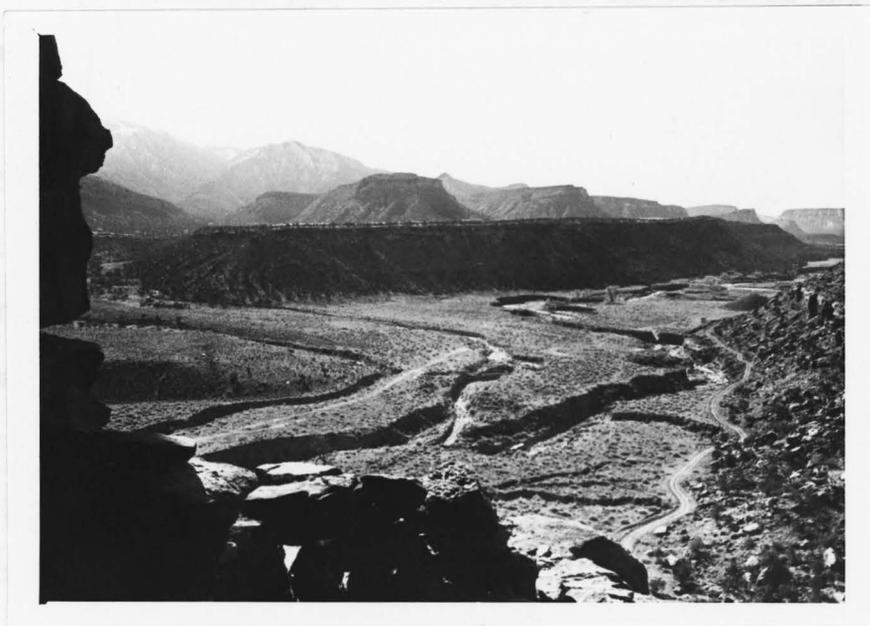


Fig. 1. Erosion in North Cottonwood Canyon, looking southeast from 42Sa1820.

ESIOLOGY

North Cottonwood Canyon is part of the Paradox Basin of the Colorado Plateau which extends into the northern San Juan drainage. The bottom most formation exposed in the canyon is the Middle and Lower Triassic formation called Moenkopi. The Moss Back member of the

archaeological sites that were located on the valley floor. Most sites found and recorded in the canyon were found above the valley floor on the higher points in the canyon and at the heads of talus slopes on the west side of the canyon where the canyon walls are highest.

Summer thundershowers as well as spring runoff from melting snows cause erosion of the higher elevations in the canyon, depositing this soil in the canyon bottom. This deposition is evidenced by the great amount of alluvium that can be seen in the walls of the deep gully cut into the canyon floor by the erosive action of Cottonwood Creek. In some places the creek has cut into the canyon floor to a depth of 30-40 ft. During the period when this survey was being conducted in the canyon, I had the opportunity to witness a very intense thundershower and flash flood down North Cottonwood Creek. During this one storm, a great deal of erosion took place as huge portions of the bank fell off into the creek during the flood.

I suspect that the creek at one time ran near the level of the topsoil in the canyon. Possibly due to mismanagement of the land or climatic conditions or both, the erosive action began, and doing so dropped the water table, prohibiting further use of the canyon for agriculture. Unfortunately, this type of erosion in such a sandy soil is very hard, and almost impossible to check.

GEOLOGY

North Cottonwood Canyon is part of the Paradox Basin of the Colorado Plateau which extends into the northern San Juan drainage. The bottom most formation exposed in the canyon is the Middle and Lower Triassic formation called Moenkopi. The Moss Back member of the

Chinle formation forms the walls of the canyon proper in the upper reaches of the canyon. It is at the base of this Moss Back conglomerate that many of the cliff base sites are found. In the upper reaches of the canyon, this formation is exposed with Moenkopi siltstone and shale underlying it and forming the talus slopes. These formations dip to the north, and in the lower reaches of the canyon they play out and are not exposed. As one travels down canyon, there are fewer and fewer sites in the Moss Back member. The canyon also widens out at the mouth, and the single site found in the lower reaches of the canyon is located at the base of the Wingate sandstone. An upper Triassic unnamed member of the Chinle formation forms the talus of the Wingate.

Formations exposed in North Cottonwood Canyon are in descending order as follows: Navaho sandstone, Kayenta formation, Wingate sandstone, Chinle formation, Chinle formation--Moss Back member, and Moenkopi formation (Fig. 2). The Moenkopi has eroded to form exposed knolls and rises in, or adjacent to, the valley floor where sites are found. A cross section of the canyon with the site numbers found in each of the formations is found in Fig. 3.

System	SERIES	GROUP, MEMBER & FORMATION	Thickness	CHARACTER OF ROCKS	
Jurassic	Lower Jurassic	Glen Canyon Group	NAVAJO SANDSTONE	650	Sandstone, massive cross-bedded gray to buff medium-grained, with thin beds of gray, sandy limestone. Weathers to rounded slopes and domes.
			KAYENTA FORMATION	150-200	Sandstone, irregularly bedded, red to reddish-brown fine- to coarse-grained and red mudstone. Sandstone beds are locally conglomeratic and fill shallow. Channels cut into the Wingate sandstone. Weathers into steep, banded cliffs.
Triassic	Upper Triassic	Glen Canyon Group	WINGATE SANDSTONE	300-350	Sandstone, massive cross-bedded reddish brown fine-grained. Characterized by long sweeping cross-laminations and vertical joints. Weathers to form vertical cliffs or steep rounded slopes.
			Chinle Formation	UPPER MEMBERS	570-910
		MOSS BACK MEMBER			0-150
		Middle (?) & Lower Triassic	MOENKOPI FORMATION	30-350	Sandstone, thin-bedded, brown to red-brown, fine-grained, with red-brown siltstone and thin beds of gypsum. The formation is characterized by the thin regular bedding and abundant ripple marks and rain-pitted surfaces. Weathers as a ribbed slope with prominent ledges.

Fig. 2. Geologic formations exposed in North Cottonwood Canyon (Grundy and Oertell 1958:199).

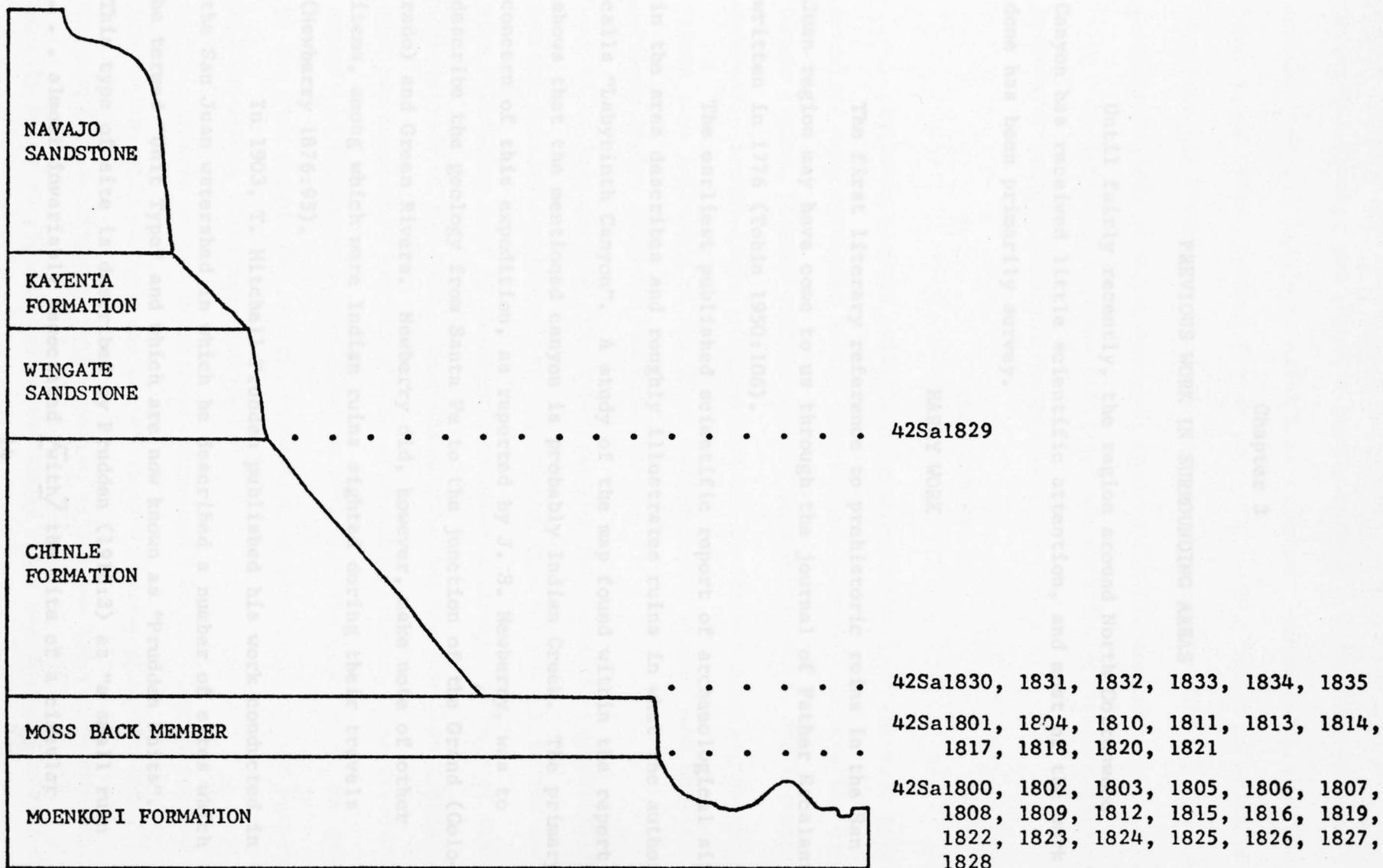


Fig. 3. Relationship of sites to geologic formations of North Cottonwood Canyon.

Chapter 3

PREVIOUS WORK IN SURROUNDING AREAS

Until fairly recently, the region around North Cottonwood Canyon has received little scientific attention, and most of the work done has been primarily survey.

EARLY WORK

The first literary reference to prehistoric ruins in the San Juan region may have come to us through the journal of Father Escalante, written in 1776 (Tobin 1950:106).

The earliest published scientific report of archaeological sites in the area describes and roughly illustrates ruins in what the author calls "Labyrinth Canyon". A study of the map found within the report shows that the mentioned canyon is probably Indian Creek. The primary concern of this expedition, as reported by J. S. Newberry, was to describe the geology from Santa Fe to the junction of the Grand (Colorado) and Green Rivers. Newberry did, however, make note of other items, among which were Indian ruins sighted during their travels (Newberry 1876:95).

In 1903, T. Mitchell Prudden published his work conducted in the San Juan watershed in which he described a number of sites which he termed "Unit Type" and which are now known as "Prudden Units". This type of site is described by Prudden (1918:3) as "a small ruin . . . almost invariably associated with the site of a circular

ceremonial chamber and a burial mound, both as a rule lying to the southward of the Pueblo." After excavation of a number of these "Unit Type" house ruins, Prudden (1918) prepared another report in which he described his findings. These structures date to the PIII time period, although Prudden at first assigned them to the PII period.

In 1937, C. R. Steen published his material on sites excavated in Natural Bridges National Monument.

GLEN CANYON

In 1941, Steward published a report in which he somewhat briefly described work conducted in the Glen Canyon. Steward assigns the Glen Canyon region, through ceramic styles, to the Mesa Verde and Kayenta subareas. Architecture is characteristic of the San Juan region and "shows some influence of the Great Period Pueblo which found here its northern limit" (Steward 1941:354).

In June of 1957, the University of Utah assumed responsibility for the archaeology of much of Glen Canyon from Hite south to the dam site, including much of the Escalante River drainage and many of the side canyons of the Glen. This did not include the San Juan system that was handled by the University of Northern Arizona. The field aspects of the project were ended in 1963 with the closing of the gates of the Glen Canyon Dam and the inundation of the canyon by the waters of Lake Powell (Jennings 1966:4-5).

Because of the large area encompassed by the Glen Canyon and its various side canyons and the physical differences in the area, it was found that occupancy in the canyon system was not continuous nor equally heavy throughout the entire area. This was due to the fact

that not all areas were as attractive as others for use by the pre-historic peoples (Jennings 1966:34).

ALKALI RIDGE

In 1946, J. Otis Brew published the results of three seasons of field work conducted on Alkali Ridge, located immediately west of Montezuma Canyon. This report is thought by many to be one of the finest on the archaeology of southeastern Utah. Brew excavated 13 sites and, of these, two were occupied from BMIII times through the PIII time period, although not continually. One site was occupied from BMIII through PII, and the remaining sites were occupied during the PII or PIII time periods, the PII time period sites being the most common.

BEEF BASIN

Further scientific knowledge in an archaeological vein did not come out of the area until 1953. At this time, Jack R. Rudy excavated or sampled nine sites in Beef Basin, which is located 15-20 air miles west of North Cottonwood Canyon. These sites were selected from an inventory of 76 sites he had located in September of 1952 and May of 1953 (Rudy 1955). Pottery found at Beef Basin falls within the transition period between PII and PIII.

LA SAL MOUNTAINS

In 1953, Hunt reported on a survey conducted on the La Sal Mountains. This area is north of Cottonwood Creek, somewhat east of an area dominated by the Fremont culture, and is within the area or region predominated by Mesa Verde Anasazi sites. Although peoples of

both cultures inhabited the La Sal Mountain area, neither group used or occupied the area extensively.

HAMMOND CANYON

Gunnerson (1960) reported the results of an archaeological survey in the Hammond Canyon area of southeastern Utah. This area is located on the south slope of Elk Ridge to the south of North Cottonwood Canyon. Twenty sites were located during the survey, nine of which were recorded in Hammond Canyon, six along the north rim of the canyon, and two additional sites along Cottonwood Creek (not North Cottonwood), located a short distance below the mouth of Hammond Canyon. Three additional sites previously recorded were also reported (Gunnerson 1960:16). Sites were found in rock shelters as well as in the open, and all sites were occupied by peoples of the Mesa Verde branch of the Anasazi. The time span covers the period from A.D. 900 to 1200, but may have begun earlier and lasted somewhat later.

NEEDLES AREA--SALT CREEK

In addition to the work done in an unpublished survey conducted by the University of Utah in Salt Creek, Pierson (1962) published a brief report concerning the archaeological resources of the Needles-Salt Creek area prior to its being designated part of Canyonlands National Park. Although Pierson describes the more spectacular ruins and assigns them to the "12th century pottery making farmers", the canyons were probably inhabited prior to and after this time period. It is also possible that peoples from the Fremont area may have used the area, judging from the Fremont-style rock art found. Pierson also

assigns the "cliff dwellings" to the Fremont tradition, but gives no supporting evidence. In light of other work done in Beef Basin and North Cottonwood Canyon, I would question this idea until further work can be done in that area and a more complete analysis of cultural material is made. All of the sites recorded in Salt Creek date from Late PII to Early PIII times, from about A.D. 1150 to A.D. 1250. This dating is "based primarily on ceramic evidence, and is somewhat tenuous since the black-on-white sherds do not match the published type descriptions closely" (Gunnerson 1969:39).

MONTEZUMA CANYON

In 1962, Ray T. Matheny reported on work conducted at Montezuma Canyon, southeastern Utah, from 1960 through early 1962. The upper portion of the canyon from the crossing of the canyon at Verdure Creek canyon to the Perkins ranch was covered and reported. Ceramic analysis and architectural styles indicate the main occupation in the canyon to date to PII-PIII times. BMIII sites were identified through analysis of pottery, as were sites occupied during subsequent time periods until PIII. All cultural material recovered, as well as a study of architecture, indicates that the canyon was inhabited by peoples of the Mesa Verde tradition.

In 1972, de Haan reported his work done in the lower portion of Montezuma Canyon, complementing Matheny's previous work. The work conducted by de Haan dealt not only with the problem of recording sites and analyzing the material collected and observed, but also with demonstrating the distribution of archaeological sites in relationship to the land and water resources in Montezuma Canyon.

Chapter 4

SITE DESCRIPTIONS

The following descriptions are of sites found and recorded during the Bureau of Land Management survey in 1968 as well as those recorded during 1969, 1970, and 1971.

As it is not possible to have photographs or drawings of all of the sites in this report, a few type sites will be shown either through drawings or photographs. The location of all sites recorded is shown on Fig. 4.

All measurements are inside unless otherwise stated and are taken at the longest and widest points. Cultural affiliation is determined through an analysis of ceramics, architecture, and implements of stone. A detailed discussion on each of these is found in following chapters.

42SA1800

Previous Designation

Site 8, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5800 ft. The site is three-fourths mile down canyon (north) from the Wilson Ranch cabin.

Site Description, Position, Surrounding Terrain

NORTH COTTONWOOD CANYON

SAN JUAN COUNTY, UTAH

Archaeological Site Survey

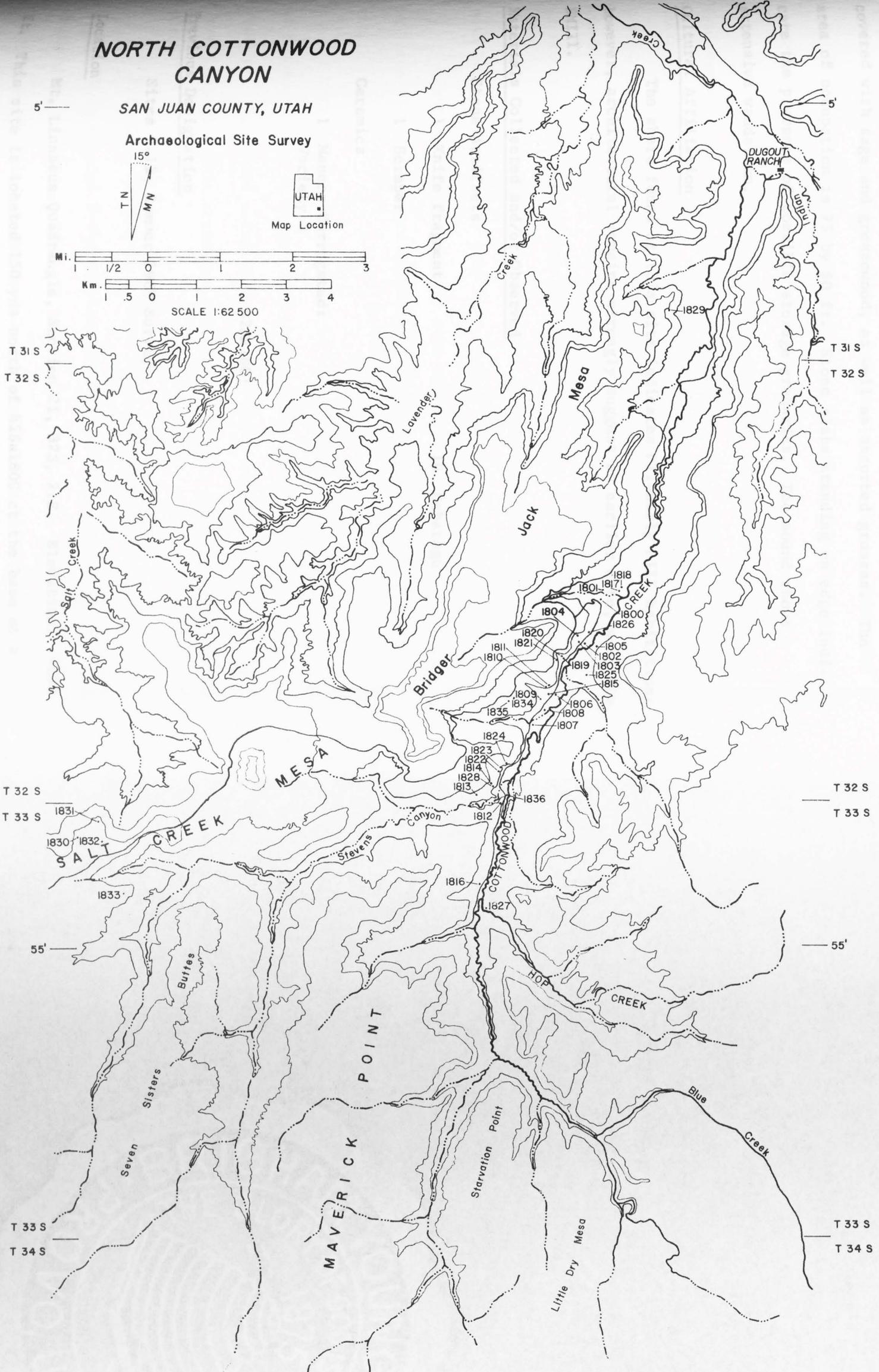
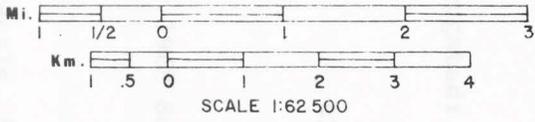


Fig. 4. Map of North Cottonwood Canyon.

42Sal800 is a natural mound rising 10-12 ft above the valley floor. The mound is 150 ft in length and 90 ft in width. It is covered with sage and greasewood, as well as assorted grasses. The area of occupation is 75 by 60 ft. Stone slabs standing on edge indicate the presence of possible storage granaries. The mound shows extensive vandalism.

Cultural Affiliation

The sherd found at this site indicates PII-Early PIII habitation; however, architectural remains strongly suggest an earlier date, possibly BMIII.

Materials Collected and/or Observed

Stone Artifacts

- | | |
|------------------|-------------|
| 1 Knife fragment | 14 Debatage |
| 1 Scraper | |

Ceramics

- 1 Mancos Corrugated:
Variety 3

42SA1801

Previous Designation

Sites 9-12, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5880 ft. This site is located 150 yds north of 42Sal800 at the base of a cliff and at the head of a talus slope.

Site Description, Position, Surrounding Terrain

The site is positioned on the north side of a small side canyon that enters Cottonwood Creek from the west. The site consists of 12 habitation and storage structures situated along the base of the cliff for 230 ft (Fig. 5). Almost all units at this complex have utilized the cliff face for one of the walls.

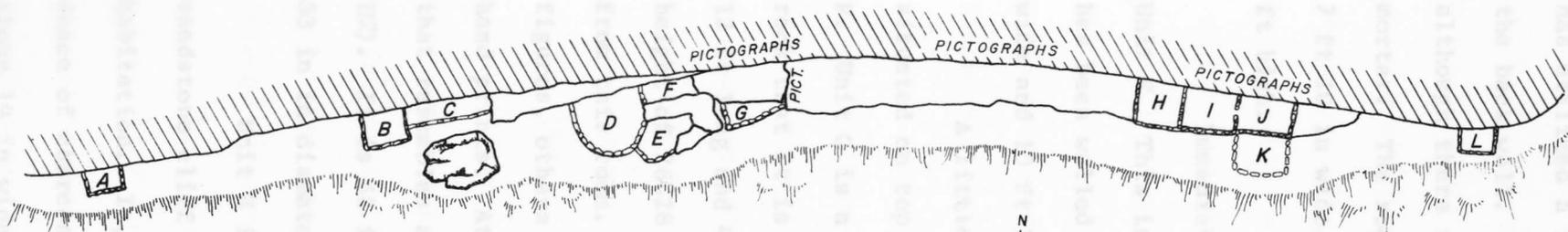
Unit A is a possible storage structure constructed of course-laid masonry with small chinking stones in the mud. This unit is the westernmost unit of this complex. Measurements of Unit A are 7 ft by 3 ft 6 in. About half of the front wall and one of the side walls are standing in fairly good condition to a height of 4 ft 10 in. A portion of the front wall has fallen into the room and is covering a portion of the floor. That part of the floor not covered by wall debris has been vandalized. The fill is only 3 in deep.

Unit B is situated 45 ft east of Unit A. Portions of the west wall are standing on this structure. The room is 7 ft long and 6 ft wide.

Unit C adjoins Unit B and is a long, narrow structure measuring 40 in wide and 16 ft long. Just a few of the front facing stones are standing. There are a few flat sandstone slabs on edge which probably form the base. This structure utilizes a split or crack in the sandstone.

Unit D is located 15 ft east of Unit C along the same cliff face. It is a large D-shaped structure, the flat portion of the D being the cliff face. It is 13 ft wide and 13 ft deep. Charcoal has been dug up in this room by vandals and may indicate that this is a habitation structure. The walls are standing to a height of 18 in.

Unit E adjoins Unit D on the east front portion of Unit D and



SCALE
0 15 30 45ft.

PLAN OF 42SA1801
NORTH COTTONWOOD CANYON
SAN JUAN COUNTY, UTAH

Fig. 5

has utilized a large stone for a portion of the front wall as well as the back wall. The remaining walls appear to be dry-laid masonry, although there is some evidence of small chinking stones and mud mortar. The room is shaped like a pork chop. It is 12 ft long and 7 ft 10 in wide. The front wall is in the best repair and stands 5 ft high.

Immediately adjoining and a little bit northeast of Unit E is Unit F. This is nothing more than a natural crack in the sandstone that has been walled up on either end. The room appears to be 3 ft 8 in wide and 10 ft long, although more area could have been used.

A little bit south and east of Unit F is Unit G. This is situated on top of a sandstone slab about 8 ft above the floor of Unit F. Unit G is a long, narrow room utilizing the top and outline of the rock that it is situated on, making an arrowhead-shaped room. It is 12 ft long and 4 ft 7 in wide. The front facing wall is standing to a height of 26-28 in. A number of white pictographs are readily seen from this room. The pictograph panel is composed of eight human figures, others that resemble a bird track, and a number of negative hand prints. At the east end of this panel is a large human figure that resembles some of the Fremont-style shield figures (Fig. 23b, p. 112). It is 68 in in total height and the body or shield portion is 33 in in diameter.

Unit H is situated 65 ft east of Unit G. It is up on a little sandstone cliff and appears to be quite a small room--too small for habitation. It, too, has been vandalized. There is very little evidence of charcoal or other cultural material in this room. A dressed stone 14 in wide and $23\frac{1}{2}$ in long was found and could very possibly

have been used as a hatch cover. The room could have been entered from the top. This room is 8 ft 1 in long and 7 ft 6 in wide. There is also a little niche within the room. A natural crack was found in the floor and was probably utilized for storage. A small bundle of tied yucca fiber (Fig. 21a, p. 107) and a polished, pink colored stone were found in the niche, as well as some reed stems, corn cobs and other material.

Adjoining the east side of Unit H is Unit I. A T-shaped doorway is located on the east of this structure. The east and west walls are still standing. The front walls that haven't fallen over have been pushed off by vandals, and the cultural material or fill on the floor has been shoveled off the front of the cliff face. The entire floor has been vandalized. There is a natural crack in the floor that may or may not have been used as a storage facility. The measurements of this room are 10 ft 10 in long and 7 ft 9 in wide. The walls on the west are standing at a height of 3 ft 11 in. Those walls are beginning to deteriorate quite badly. They are course-laid masonry with mud and stone chinking.

Unit J is immediately adjacent to Unit I and might have been a plaza or very small courtyard for Unit I. Its measurements are 10 ft 4 in long and 6 ft 4 in wide. There is just a faint outline of walls on this unit. However, the portion that immediately adjoins Unit I is quite high, and it is possible that this could have been used as a storage unit for Unit I, as maybe was Unit H.

Unit K is situated 10 ft immediately below Unit J at the base of the cliff. This is a small unit and was probably used for storage. Its measurements are 8 ft 8 in in length and 8 ft 7 in in width. This unit is barely discernible, with a faint outline appearing.

Thirty feet east of Unit K is Unit L. It is up on a little sandstone shelf and is a small unit that was probably used for storage. It is situated up 5 ft from the base of the cliff. Its measurements are 4 ft in width and 5 ft in length. The west wall is the only one remaining of this structure. Immediately above Unit L are some positive hand prints. These appear to be the result of the builder or builders of this structure wiping the mud from their hands. Mud from the top of the wall can still be seen on the roof, 7 ft 7 in above the floor.

Cultural Affiliation

PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts

1 Polishing stone

2 Debatage

Ceramics

2 Mesa Verde Black-on-white: Variety 1

1 Mancos Corrugated: Variety 2

5 Mesa Verde Black-on-white: Variety 2

1 Uncompahgre Smeared: Variety 2

Vegetable Material

1 Yucca bundle

1 14-row corn cob

2 Reed fragments

9 12-row corn cobs

1 Black birch fragment

7 10-row corn cobs

Corn husk fragments

2 8-row corn cobs

42SA1802

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5800 ft. 42SA1802 is immediately west of the Wilson Ranch. The site lies just over the fence line bordering the ranch and just east of the dirt road which runs along the floor of the canyon.

Site Description, Position, Surrounding Terrain

The site is on a natural low, very rocky mound covered with sagebrush and tumbleweeds. Measurements of the mound are 150 ft by 90 ft at the base. It is 15 ft high. There is no evidence of structures, but if there was any area of occupation on the mound, it appears to have been at the top. Most cultural material was found on the east slope. There is evidence of pothunting activity being carried on in this area.

Cultural Affiliation

Pueblo II-Early PIII

Materials Collected and/or Observed

Stone Artifacts

- | | | | |
|---|--|----|----------|
| 1 | Crude projectile point | 36 | Debatage |
| 3 | Projectile point fragments
(Fig. 18f, p. 102) | | |

Ceramics

- | | | | |
|---|--------------------------------------|----|------------------------|
| 5 | Mesa Verde Black-on-white: Variety 1 | 11 | Mancos Ceramic Group |
| 5 | Mesa Verde Black-on-white: Variety 2 | 2 | Unidentified Gray Ware |

42SA1803

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5800 ft. The site is southwest of the Wilson Ranch building across the dirt road.

Site Description, Position, Surrounding Terrain

This site is a low natural rise of ground at the bottom of the talus slope just across the road from the Wilson Ranch and just southwest from 42Sa1802. The ground is red and sandy and contains a large number of natural stones. Sagebrush, juniper, pinon pine and tumbleweeds make up the vegetation. The entire mound contains a small amount of cultural material. There are no structures or remains of structures in evidence. It appears to have been a seasonal camp site or use site.

Cultural Affiliation

PII-Early PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

3 Scrapers (Fig. 20e, p. 106) 133 Debatage

Stone Artifacts, Ground

1 Metate, broken

Ceramics

34	Mesa Verde Black-on-white: Variety 1	21	Mancos Corrugated: Variety 2
57	Mesa Verde Black-on-white: Variety 2	1	Mancos Corrugated: Variety 3
1	Mustang Black-on-white: Variety 2	1	Devil Mesa Painted-corrugated
13	Mancos Corrugated: Variety 1	15	Unidentified Gray Ware

42SA1804

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 6000 ft. 42SA1804 is west of the Wilson Ranch at the top of a talus slope 175 ft above the canyon floor.

Site Description, Position, Surrounding Terrain

The talus slope directly in front of the site is covered with juniper, grasses, and Brigham tea and is quite rocky. The ruins of the site are designated on the topographic maps of the area, and they have been extensively vandalized. The site consists of six separate small rooms and appears to be a granary complex. Small overhangs are utilized for the building of the structures.

The granaries are constructed of course-laid masonry. Small stone spalls are used for chinking materials in the walls. Units A and C are in fairly good repair. The remaining units are in very poor condition and only have a portion of a wall left standing.

Unit A is 5 ft wide, 7 ft long, and has a 2 ft ceiling. There is a flat stone lintel over the roof. No cultural material was found in this granary. Unit A is not located on the same level as the other units but is approximately 15 ft above the other units in another layer in the formation.

Unit B is located 90 ft south of Unit A. The northern wall is gone. Fill in this unit is approximately 4 in deep. No cultural material was found. There has been some pothunting activity in this granary. The unit is 7 ft long, 4 ft wide, and has a 2 ft ceiling.

Unit C is situated 25 ft south of Unit B and is in very good

repair. The base stones are flat sandstone lying on edge up for 12-15 in and then course-laid masonry laid on top of this. This unit is 7 ft wide, $8\frac{1}{2}$ ft long and has a $3\frac{1}{2}$ ft ceiling. There is some evidence of fire blackening on the ceiling in this structure, indicating possible use as a shelter, although it is too small to have been used as a living unit. Fill in this unit, like the others, is from 2-4 in deep. Shredded juniper bark, animal excrement and other materials mixed with sand make up the fill.

Units D, E, and F are adjoining Unit C. They form a group, each utilizing the outside walls of one for the inside walls of another. Unit D is 5 ft wide and 6 ft long. There is a natural shelf in this cave, giving the back portion of this unit an 18 in ceiling. The front portion has a 2 ft ceiling. The remaining mortar is in good condition, especially in the back portion of the cave. Finger impressions and small chinking stones can still be seen in the mortar. The front portion of this unit is eroding as it is exposed to weather.

Unit E is very small, and there is only a faint outline remaining. It is 3 ft wide and 4 ft long and has a 2 ft ceiling. The inside walls serve as the walls of Units D and F.

Unit F is 4 ft wide, 4 ft long and has a 2 ft ceiling.

Cultural Affiliation

PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts

1 Debatage

Ceramics

1 Mesa Verde Black-on-white: Variety 2

1 Dalton Corrugated: Variety 1

2 Mancos Ceramic Group

Vegetable Material

1 Yucca spine

1 12-row corn cob

42SA1805

Previous Designation

Site 7, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 22, 32S, 21E. Elevation: 5840 ft. The site is northeast of the Wilson Ranch across Cottonwood Creek.

Site Description, Position, Surrounding Terrain

42SA1805 is a pictograph located on a rock ledge at the top of a talus slope (Fig. 22b, p. 110). It is situated on a flat cliff face in a small overhang protected from the weather. Cedar, grass, and Brigham tea are found in the area. The site consists of 13 vertical lines arranged side by side, approximately 8-10 in in length and 1½-2 in apart. They are painted with white clay. The condition is good, with the exception of one line that is being eroded away.

Cultural Affiliation

Unknown. There were no other artifacts found at the site to allow comparative dating and/or cultural affiliation.

Materials Collected and/or Observed

None

2 Spindle whorls (42SA1806

21d-g, p. 107)

24 Mancos Corrugated:
Variety 2Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5900 ft. 42SA1806 is located one mile above the Wilson Ranch west of Cottonwood Creek on the east side of the road immediately adjacent to it.

Site Description, Position, Surrounding Terrain

The site is a natural occurring mound set on the bottom of the valley floor (Fig. 26, p. 116). There is some juniper, sage, rabbit brush, and greasewood. The trash mound was found on the southeast slope of the mound along with quite a bit of charcoal. The upper portion of the mound may have been occupied, as there appears to be a structure at that point. Extensive pothunting has been done on the southeast portion of the site. One pothole has exposed a wall.

Cultural Affiliation

BMIII-PI, Early PII, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

- | | |
|-------------------------------------|---------------------------------------|
| 1 Projectile point fragment | 1 Scraper (Fig. 19a, p. 105) |
| 1 Knife (Fig. 20f, p. 106) | 2 Choppers (Fig. 20b, d, p. 106) |
| 1 Knife fragment (Fig. 19d, p. 105) | 1 Scraper fragment (Fig. 20c, p. 106) |
| 202 Debatage | |

Stone Artifacts, Ground

- | | |
|-----------------------------|------------------------------|
| 1 Mano | 1 Pendant (Fig. 18a, p. 102) |
| 2 Metates (Fig. 16, p. 100) | |

Ceramics

- | | | | |
|-----|--------------------------------------|----|---------------------------------|
| 2 | Spindle whorls (Fig. 21d-e, p. 107) | 34 | Mancos Corrugated: Variety 2 |
| 70 | Mesa Verde Black-on-white: Variety 1 | 1 | Mancos Corrugated: Variety 3 |
| 199 | Mesa Verde Black-on-white: Variety 2 | 28 | Menefee Gougged: Variety 1 |
| 2 | Mustang Black-on-white: Variety 2 | 1 | Menefee Gougged: Variety 2 |
| 13 | Ismay Black-on-gray: Variety 1 | 1 | Uncompahgre Smearred: Variety 1 |
| 1 | Tusayan Polychrome | 1 | Uncompahgre Smearred: Variety 2 |
| 3 | Mesa Verde Group | 1 | Rincon Neck-banded: Variety 1 |
| 14 | Mancos Ceramic Group | 2 | Chapin Gray: Variety 1 |
| 41 | Mancos Corrugated: Variety 1 | | |

42SA1807

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5920 ft. 42SA1807 is one-half mile south of 42SA1806 on the east side of the road.

Site Description, Position, Surrounding Terrain

The site is located on a natural high rise of ground and consists of two separate walled structures, the larger, Unit A, being 10 ft by 16 ft. Unit B is situated 90 ft north of Unit A. It forms a rough circle 9 ft in diameter. Most of the walls are fallen, and those that remain are no more than three courses high. Because of the poor condition of these structures, it is very hard to determine their exact size and dimensions. Pinon, juniper, sage, greasewood, cactus, and rabbit brush are found in the area.

Cultural Affiliation

PIII -PI, VII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

4 Knife fragments (Figs. 19c, 1-n, p. 105)

2 Projectile point fragments (Fig. 18d, p. 102)

27 Debatage

Stone Artifacts, Ground

1 Shaft smoother fragment (Fig. 18b, p. 102)

Ceramics

1 Mesa Verde Black-on-white: Variety 1

5 Mesa Verde Black-on-white: Variety 2

42SA1808

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5920 ft. The site is located on a low, natural occurring mound one-fourth mile northeast of 42SA1807.

Site Description, Position, Surrounding Terrain

There is evidence of three structures at this site, all in very poor condition. There are no room outlines that can be identified, only piles of rubble. The large pile seems to have another smaller pile attached to it. The larger pile of rubble, Unit A, is 22 ft in diameter. Ten feet north of this unit is Unit B. It measures 8 ft in diameter. The largest quantity of pottery was found on the south slope of the mound.

Cultural Affiliation

BMIII-PI, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

64 Debatage

Stone Artifacts, Ground

2 Mano fragments

Ceramics

10 Mesa Verde Black-on-white: Variety 1

31 Mesa Verde Black-on-white: Variety 2

1 Mancos Ceramic Group

9 Mancos Corrugated: Variety 1

23 Mancos Corrugated: Variety 2

2 Mancos Corrugated: Variety 3

2 Unidentified Gray Ware

7 Ismay Black-on-gray: Variety 1

6 Chapin Gray: Variety 1

1 Devil Mesa Painted-corrugated

42SA1809

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5900 ft. The site is located on a small, low natural rise across the road from 42Sa1808.

Site Description, Position, Surrounding Terrain

The soil is very sandy, and vegetation, juniper, cactus, and some tumbleweed, is very sparse. The one possible structure at this site is a small stone alignment 6 ft square and no more than one course high. Most of the artifacts found here were found on the northeast slope.

The site could have been a small seasonal use area.

Cultural Affiliation

BMIII-PI, PI, PII-Early PIII, PIII, Late PIII

Materials Collected and/or Observed

Stone Artifacts

1 Projectile point fragment 2 Hammerstones

1 Scraper 68 Debatage

Ceramics

17 Mesa Verde Black-on-white: Variety 1

1 Mancos Corrugated: Variety 3

24 Mesa Verde Black-on-white: Variety 2

4 Mancos Ceramic Group

1 Cannonball Incised: Variety 1

4 Hovenweep Ceramic Group

37 Mancos Corrugated: Variety 1

1 Moccasin Neck-banded: Variety 1

50 Mancos Corrugated: Variety 2

13 Chapin Gray: Variety 1

1 Devil Mesa Painted-corrugated (worked)

42SA1810

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 6100 ft. This site is west of 42SA1806 and is on the same level as 42SA1810 of the talus slope.

Site Description, Position, Surrounding Terrain

This site consists of two possible granaries situated one above the other on natural occurring sandstone shelves. The larger is 11 ft in diameter and is roughly circular in shape. The highest portion of

the remaining wall is 4 ft high; the lowest portion, 18 in. The larger granary is above the other and is visible from the valley floor. The smaller granary has only the east wall remaining, making it impossible to take a measurement of the room. Some artifacts appear on the talus slope below these structures. Juniper, pinon and scrub brush are found on the talus slope.

Cultural Affiliation

PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

3 Debatage

Stone Artifacts, Ground

1 Mano fragment

Ceramics

6 Mesa Verde Black-on-white: Variety 2

3 Mancos Ceramic Group

42SA1811

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 6100 ft. This site is west of 42Sa1806 and is on the same level as 42Sa1810 northeast along the cliff base.

Site Description, Position, Surrounding Terrain

This site is a probable granary, although a portion of the cliff face appears to have fallen and destroyed all except the south wall. Immediately to the south of the wall are some pictographs which appear

making this one of the few sites in the canyon that may have kivas.

The largest depression is 25 ft in diameter and is located at the north end of the site (Fig. 6). The road has destroyed the west wall of this structure, at least on the surface. Immediately to the north and east of this depression is a large pile of rubble that could be remains of walls. This could have also extended along the west wall, but the road that was cut through this portion of the site may have destroyed the walls.

Twenty feet to the south of the large depression is another pile of rubble that could indicate another room or rooms. This pile of rubble is adjacent to the north end or side of another depression that is 15 ft in diameter. Both the mound and depression have been vandalized. During the digging done by vandals, a portion of a wall in the small depression has been exposed. On the south end of the small depression is another pile of building rubble, indicating another possible room or rooms.

Across the road west of the small depression is another depression that measures 10-12 ft in diameter. This depression has no visible rooms or evidence of rooms attached to it. South of the 15 ft depression and building rubble 250 ft is a stone alignment that may be the remains of a storage or habitation structure. The remains of this room are hard to discern, but it appears to have been 8-10 ft square.

A test pit was dug in the largest depression at the site. The pit was dug to a depth of 40 in through a sandy clay soil interspersed with charcoal. At 40 in a light colored clay appeared. This was also interspersed with charcoal. Two inches into this layer there was no

more charcoal or other evidence of habitation. It is thought that this clay layer constitutes the floor of this structure. The walls that have been exposed by vandalism show course-laid masonry that has been plastered with mud. In some cases, rounded river cobbles have been used, but in most cases, sandstone blocks have been used for building material. This site has the most promise of any site recorded in the canyon of having ceremonial significance. It is owned privately by Mr. Robert Radd of the August Ranch, and, if protection could be obtained from Mr.



Fig. 6. Largest depression (possibly a "Unit Type" structure) at 42Sa1812.

48 Mesa Verde Black-on-white; Variety 1

180 Mesa Verde Black-on-white; Variety 2

7 Mustang Black-on-white; Variety 2

1 Islay Black-on-gray; Variety 2

24 Islay Black-on-gray; Variety 1

2 Navajo Sangre; Variety 1

1 Navajo Sangre; Variety 2

9 Navajo Corrugated; Variety 1

2 Devil Mesa Painted-corrugated

1 Chapin Gray; Variety 1

2 Unidentified Gray Ware

more charcoal or other evidence of habitation. It is thought that this clay layer constitutes the floor of this structure. The walls that have been exposed by vandalism show course-laid masonry that has been plastered with mud. In some cases, rounded river cobbles have been used, but in most cases, sandstone blocks have been used for building material. This site has the most promise of any site recorded in the canyon of having ceremonial significance. It is owned privately by Mr. Robert Redd of the Dugout Ranch, and, if permission could be obtained from Mr. Redd, it would be a most important site to excavate.

Cultural Affiliation

BMIII-PI, PII-Early PIII, PIII, Late PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

- | | | | |
|---|--|-----|--------------------------------------|
| 1 | Hammerstone | 2 | Scrapers (Figs. 19e, 20a, pp. 105-6) |
| 1 | Projectile point fragment (Fig. 19g, p. 105) | 158 | Debatage |
| 1 | Knife fragment | | |

Ceramics

- | | | | |
|-----|--------------------------------------|---|-------------------------------|
| 1 | Spindle whorl | 9 | Menefee Gouged: Variety 1 |
| 88 | Mesa Verde Black-on-white: Variety 1 | 1 | Menefee Gouged: Variety 2 |
| 140 | Mesa Verde Black-on-white: Variety 2 | 9 | Dalton Corrugated: Variety 1 |
| 7 | Mustang Black-on-white: Variety 2 | 2 | Devil Mesa Painted-corrugated |
| 1 | Ismay Black-on-gray: Variety 2 | 1 | Chapin Gray: Variety 1 |
| 4 | Ismay Black-on-gray: Variety 1 | 2 | Unidentified Gray Ware |

- | | |
|------------------------------------|--------------------------------------|
| 5 Mancos Ceramic Group | 4 Mesa Verde Ceramic Group |
| 29 Mancos Corrugated:
Variety 1 | 1 Cannonball Incised:
Variety 1 |
| 34 Mancos Corrugated:
Variety 2 | 8 Hovenweep Corrugated:
Variety 2 |
| 1 Mancos Corrugated:
Variety 3 | 3 Unidentified Corrugated |
| 1 Unidentified Red Ware | |

Bone

- 3 Unidentified bone fragments

42SA1813

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6300 ft. The site is west across the canyon from 42SA1812 at the mouth of Stevens Canyon. It is located at the base of the sandstone and shale cliffs at the top of the talus slope.

Site Description, Position, Surrounding Terrain

This granary complex, consisting of the remains of 11 granaries, covers approximately 300 yds along the cliff face. Some of the granaries are removed from some of the others as much as 150 ft, but it is felt that they should be included as part of one complex, as they are all fairly close together. They are course-laid masonry structures with clay mortar, and three have the door openings still remaining.

Units A and B are deteriorated to the point that it would be very hard to measure them accurately; therefore, they were not measured. They have only portions of one wall remaining. Unit C is in much the

same condition with only one wall left standing, and it, too, was not measured.

Unit D adjoins Unit C to the east and is 5 ft long and 4 ft 8 in deep. The entire side wall, or the wall facing the canyon, has fallen off. The doorway on the east is still intact and has a sandstone lintel as well as four sticks as lintels. Each stick is approximately 1 in in diameter.

Unit E is situated 25 ft from Unit D to the northeast. This unit is 7 ft in diameter. The front portion has fallen away.

Immediately adjoining this unit to the northeast is the finest structure in this complex. Unit F is a complete unit with all of the walls remaining. It blends in very well with the formation. It is 5 ft long and 2 ft 4 in wide.

Unit G is situated just northeast of Unit F on a narrow shelf. It is on the same level as the other units, but the formation has fallen away from in front of this at some time prior to the building of the granary, leaving a long, narrow shelf for it to be built on. It is accessible only by crawling along the shelf. As only the front or northeast wall is left standing, it is not possible to obtain measurements for this room.

Units H and I are situated northeast of Unit G 75 ft. There are only portions of two walls left on these granaries, making it impossible to obtain measurements of either room. It appears that these two rooms probably joined together.

Units J and K are situated at the end of this sandstone shelf 85 ft from Unit G. Unit J still has a third of its walls completely standing and another small portion of the walls not standing. It is in good state of repair. None of them has a door left, and only a few

5 ft 6 in in diameter and has a 2 ft 4 in ceiling. Fill in all of these rooms is very shallow--2-4 in deep. It is composed mostly of material that has fallen from the ceiling of these caves. Unit K is a little unit adjoining Unit J. It is a very small unit and is very badly deteriorated. It is 3 ft 8 in long and 3 ft 6 in wide and has a 2 ft 6 in ceiling.

Units L and M are located 100 ft down the canyon or northeast from Unit K. These two units are just barely discernible, comprised of just two little walls clinging against the sandstone shale face that they are built on. They are on a very narrow shelf only about 8 ft wide. It is not possible to take measurements of these rooms.

A small petroglyph (Fig. 22a, p. 110) of a circle within a circle was found on the talus slope immediately below this site. This is the only petroglyph found in the canyon.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

None

42SA1814

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6300 ft. The site is one-fourth mile northeast of 42SA1813 on the same level.

Site Description, Position, Surrounding Terrain

The site consists of 11 granaries, none of which is in a very good state of repair. None of them has a door left, and only a few

have much of their walls standing. This complex runs along the cliff face for about 100 yds.

Units A, B, and C in this complex are located on the southwest end and all adjoin one another, each utilizing the walls of the other. Unit A is 7 ft long and 4 ft wide, with a 3 ft ceiling. Unit B is 10 ft in length, 5 ft in width, and has a 3 ft ceiling. The northeastern wall is in the best condition and is standing its full height. Unit C adjoins Unit B on the northeast end. The walls are in very bad repair. Erosion has taken place in this structure, making it impossible to take accurate measurements.

Units D and E are situated 25 ft northeast of Units A, B, and C, and they, too, are in very poor repair. Unit D is 10 ft 8 in long and 3 ft wide. Unit E is 7 ft 2 in long and 3 ft 2 in wide.

Unit F is situated 50 ft northeast of Unit E. Only one wall is remaining. Width of the room would have been 3 ft. Ceiling height would also have been 3 ft.

Units G and H are situated about 75 ft northeast of Unit F. Unit G is in very poor repair, and it is not possible to give measurements for it. Unit H is in good repair and is one of the larger granaries in this complex. This is a semi-circular or D-shaped granary. There are remains of two pieces of wood near where the doorway used to be. It is possible that these are wooden lintels. This unit is 6 ft long along the back of the room and 5 ft 3 in wide. The northeast wall is standing full height.

Units I and J are situated 30 ft from Unit H. They are also very badly eroded. Unit I is 6 ft long and 3 ft wide, with a 2 ft 6 in ceiling. Unit J is 7 ft long and 4 ft wide, with a ceiling height

of 2 ft 6 in.

Unit K is the northeasternmost unit in this complex and is very badly eroded. It appears to be 4 ft wide, but it is not possible to take accurate measurements of this unit.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

None

42SA1815

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5900 ft. This site is located west of 42SA1806 across the road at the base of the talus slope.

Site Description, Position, Surrounding Terrain

This site consists of a probable habitation structure on the top of a large boulder and a granary at the base of the east side of the boulder. The outline of the wall of the habitation site is still visible and measures 11 ft by 15 ft, although the surface area on the top of the rock is 11 ft by 22 ft. Although the outline of the walls is still visible, it is standing to a height of only one stone. The rest of the wall has either fallen or been destroyed. The boulder provides the back wall and roof of the granary. The front wall of the granary has fallen away, but the side walls remain. The granary is 3 ft in diameter and the walls are standing to a height of 2 ft. The granary is constructed of course-laid masonry with mud mortar. The

fill in both the habitation structure and granary is 3-4 in of sandy soil interspersed with sandstone spalls and shale. No cultural material was noted in the fill.

Site Description, Position, Surrounding Terrain

Cultural Affiliation

Early PII, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

1 Knife fragment (Fig. 19j, p. 105)	1 Projectile point (Fig. 18h, p. 102)
-------------------------------------	---------------------------------------

17 Debatage

Stone Artifacts, Ground

1 Mano fragment

Ceramics

21 Mesa Verde Black-on-white: Variety 1	8 Mancos Ceramic Group
31 Mesa Verde Black-on-white: Variety 2	6 Menefee Gouged: Variety 2
1 Mustang Black-on-white: Variety 2	16 Mancos Corrugated: Variety 1
2 Mustang Black-on-white: Variety 1	3 Mancos Corrugated: Variety 2
26 Menefee Gouged: Variety 1	1 Dalton Corrugated: Variety 1

42SA1816

Cultural Affiliation

Location

Mt. Linnaeus Quadrangle, Section 8, 33S, 21E. Elevation: 6220

Materials Collected and/or Observed

ft. This site is located on the west side of the canyon on a natural

Stone Artifacts

rise of ground overlooking Cottonwood Creek, four-tenths mile north of

the old Cottonwood Ranger Station. This site is one of two recorded during the survey that are on land administered by the Forest Service.

Site Description, Position, Surrounding Terrain

This site is composed of three contiguous rooms of course-laid masonry, sandstone slabs, and stone. The mortar is chinked with smaller stones or spalls.

Unit A is a circular structure 12 ft in diameter that has been constructed on the natural sandstone. The west wall of this structure is standing to a height of 44 in. There is a great deal of vandalism at the site. This room has been almost completely cleaned out by vandals. The refuse has been thrown out the front, or east, portion of the site down the hill toward Cottonwood Creek.

Unit B is 13 ft 4 in long and 7 ft 5 in wide and adjoins Unit A on the west side. The bottom course of stones is all that is left of this room. Three large upright sandstone boulders form a portion of the wall.

Unit C adjoins Unit B on the west and is 12 ft long and 7 ft 3 in wide. The north wall is the best preserved and is standing to a height of 3 ft 6 in. Surrounding vegetation is hollyoak, pinon, juniper, and other small unidentifiable shrubs and grasses. The area of occupation at this site is 40 ft by 70 ft.

Cultural Affiliation

BMIII-PI, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts

- 1 Projectile point (Fig. 18c, p. 102) 34 Debatage

Ceramics

- | | |
|---|---------------------------------|
| 18 Mesa Verde Black-on-white: Variety 1 | 2 Devil Mesa Painted-corrugated |
| 5 Mesa Verde Black-on-white: Variety 2 | 12 Mancos Corrugated: Variety 1 |
| 1 Ismay Black-on-gray: Variety 1 | 12 Mancos Corrugated: Variety 2 |
| 1 Chapin Gray: Variety 1 | 4 Mancos Corrugated: Variety 3 |
| 1 Mancos Ceramic Group | |

Bone

- 15 Unidentified bone fragments

42SA1817

Location

Mt. Linnaeus Quadrangle, Section 22, 32S, 21E. Elevation: 5880 ft. This site is located on the same level as 42SA1801 about one-fourth mile north or down canyon.

Site Description, Position, Surrounding Terrain

The site consists of two course-laid stone granaries chinked with small stone spalls. The stones are not dressed and workmanship is poor. The larger room is 6 ft in diameter, and the smaller is 4 ft in diameter. There is a possibility of another room between these two; however, the walls have been destroyed. The walls on the remaining rooms are also partially destroyed. Two juniper trees in front of these granaries tend to hide them from view from the canyon floor. The walls of the two structures are standing to a height of

2 ft 6 in. The fill on the floors is loose, sandy soil with no evidence of cultural material.

Location

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

Ceramics

- 1 Spindle whorl fragment
(Fig. 21c, p. 107)

42SA1818

Location

Mt. Linnaeus Quadrangle, Section 22, 32S, 21E. Elevation: 5880 ft. This site is located 75 ft north of 42SA1817 near the rim of the canyon.

Site Description, Position, Surrounding Terrain

This site is a small granary constructed of sandstone slabs with mud and small stone chinking. The walls are fairly stable and in good condition. The door is small and its lintel is missing. The granary is 3 ft long and 2 ft wide. The walls are constructed of vertical as well as horizontal pieces of sandstone. The fill in this structure is 3-4 in of loose, sandy soil with no evidence of cultural material.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

None

42SA1819

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5760 ft. This site is located one-fourth mile south of the Wilson Ranch at the mouth of a small side canyon 40 ft up the sandstone and shale talus slope under a large, overhanging sandstone slab.

Site Description, Position, Surrounding Terrain

This site has been extensively damaged by natural erosion as well as vandalism, making identification of the site difficult. It could be either a habitation site or a granary. Only one wall of course-laid masonry remains standing. It was not possible to take measurements of this room because of its poor condition.

Cultural Affiliation

Unknown

Materials Collected and/or Observed

None

42SA1820

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 6000 ft. This site is located directly above 42SA1819 at the base of the cliff and the top of the talus slope. Some of the structures extend higher up on the cliff.

Site Description, Position, Surrounding Terrain

This site is composed of nine structures, three of which are

circular or D-shaped. These three could have been used as habitation structures or served a ceremonial purpose. The remaining structures appear to have been used as storage structures.

Unit A is a two-story structure with portions of the second story still standing. Some of the roof beams between the first and second stories are still present. This unit has a T-shaped doorway characteristic of Pueblo III times. Portions of the wall near the cliff face are still chinked with mud and small stone spalls. The outside wall appears to be dry-laid masonry, although the mortar could have weathered out from between the stone. Unit A is 7 ft wide and 7 ft 6 in long with a 5 ft ceiling from the top of the fill to the roof. There appears to be about 12-18 in of fill on the floor. The inside of the room has been extensively vandalized. Pieces of charcoal that have been dug up are the only evidences of cultural material present. The five posts remaining of the original roofing material are badly deteriorated, and it may not be possible to use them for obtaining a dendrochronology date.

Unit B is located 15 ft south and at a level just below Unit A. It is semi-circular in shape, utilizing the natural sandstone for a portion of the walls, and is roughly 11 ft in diameter. A test trench was put into this unit, utilizing an old pothunter's trench. This trench was dug to a depth of 15 in from the south wall for a distance of $4\frac{1}{2}$ ft. Near the south wall at a depth of 10 in was a layer of charcoal. Near the center of the room, or the north end of the trench, and at the same level, a pocket of very fine, gray ash interspersed with particles of burned clay was found. Further excavation might reveal a firepit in this area. The entire site should be

excavated.

Unit C is located 10 ft east of Unit A. Like Units A and B, it utilizes part of the natural sandstone cliff as part of the wall. This structure is $10\frac{1}{2}$ ft in diameter. There are old timbers lying around in this room, probably remains of the roof timbers. They are also badly deteriorated. Architecture for Units B and C appears to be the same as for Unit A.

Unit D is situated to the north and directly above Unit C on a small sandstone cliff. Only portions of two course-laid masonry walls remain standing. The longest is 7 ft in length, while the shortest measures 6 ft in length.

Unit E is situated directly east of Unit B, but on the same level as Units A and C. This structure is built on a natural sandstone platform, and only one course of a dry-laid wall remains standing. The room is 7 ft square.

Unit F is located 15 ft east of Unit E, and only a small portion of the north and east walls are left standing. The north wall is 4 ft 6 in long and the east wall extends from the north wall for only 18 in. This room also is situated on a large flat sandstone boulder.

Unit G is located west of and 12 ft above Unit A. Unit H is situated about 4 ft above Unit G, and Unit I is located 6 ft above Unit H. All three of these small structures were probably used as storage facilities, as they appear to be too small to be used for anything else. In order to reach Units G, H, and I, it is necessary to climb up a natural crack in the sandstone cliff wall for a distance to reach a platform constructed by placing timbers lengthwise of the

crack and placing sandstone slabs and soil over the timbers. This platform then allows one to climb up to these units. Because of the precarious position one was in when climbing to these structures, measurements were not taken. This site has been extensively vandalized and should be excavated before it is further destroyed.

Cultural Affiliation

Location Late PII-Early PIII

Materials Collected and/or Observed

Ceramics

1 Mancos Ceramic Group

4 Mancos Corrugated:
Variety 2

Site Description, Position, Surrounding Terrain 42SA1821

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 6050 ft. This site is located one-fourth mile up canyon (south) from the Wilson Ranch on the south side of a small side canyon directly across canyon from 42SA1820. It is situated halfway up the cliff face on a small ledge. It can only be reached with difficulty.

Site Description, Position, Surrounding Terrain

This site appears to be a course-laid sandstone structure. Because of its size, it was probably a storage structure. The walls are partially fallen, but the site is in fairly good shape. Because of its inaccessibility, no measurements were taken. There appears to be a pole on one side of the structure that may be used to brace up a wall. This site can also be seen from the top of the canyon.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

None

42SA1822

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6000 ft. This site is located $2\frac{1}{2}$ mi up canyon from the Wilson Ranch cabin and one-half mile below 42SA1812. It is situated on the west side of the canyon just up from the valley floor in a natural overhang or cavate.

Site Description, Position, Surrounding Terrain

The front of the overhang and the surrounding area are covered with greasewood, sagebrush, hollyoak, prickly pear cactus, tumbleweeds, and other unidentifiable grasses and other smaller plants. The site, which covers 110 ft along the cliff face, consists of a shallow cave and three rooms that are situated south along the cliff face from the cave (Fig. 27, p. 116). The cave is 23 ft across the mouth and is 15 ft deep. The ceiling is $8\frac{1}{2}$ ft at the mouth. The three rooms situated to the south of the cave are only faint outlines and cannot be measured. One appears to be D shaped, and the remaining two may be rectangular in shape. They would have to be excavated in order to obtain accurate measurements and to determine actual shape.

Test pits were dug in two of these rooms. The test pit in the northern, or D-shaped, room was dug to a depth of 12 in. A great deal of charcoal was encountered. The soil is very clay-like and is inter-

dispersed with a great deal of charcoal. What appears to be the floor level was reached at a depth of 12 in. It appears to be covered with flat sandstone slabs or flagstone. The soil in this room was very moist.

The test pit dug in the adjoining room south was dug to a depth of 11 in. At a depth of 6 in, a thin layer of charcoal was reached, but no floor level was encountered. The soil in this room was very dry.

Neither of these probable rooms appears to be very large, and both could be excavated in a day with the proper man power and equipment.

A test pit was dug near the mouth of the cave to a depth of 30 in, and this was a loose, sandy, clay-like soil, interspersed with small stone. Charcoal was encountered from the surface to a depth of 30 in. The cave could show continued habitation over a long period of time. The roof of the cave is fire blackened, and portions of it have fallen and make up part of the fill on the cave floor.

Two pictographs are found at the site on the sandstone cliff face above the three probable rooms (Fig. 24a-b, p. 113). One pictograph, done in white paint, is a double circle approximately 8 in in diameter. It is located too high on the cliff to measure. Another pictograph is located 25 ft south of the circle at the same level and appears to be an anthropomorphic horned figure. The problem of how these pictographs were put at the height that they are found seems to have been solved with the finding of gobs of clay and mortar along this rock face, indicating the outline of a room or rooms that may have been two-story structures. This would have made it very easy for the individual to stand on the roof of these structures and paint the figures.

Because of the amount of deposition on the floor of the cave

(30 in minimum), the dryness of such a site, which tends to preserve otherwise perishable material, and the period of occupation suggested by ceramics found at the site, I would recommend that this site be excavated. It has received comparatively little vandalism and has a potential of providing us with a great deal of data.

Cultural Affiliation

BMIII-PI, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts

1 Use flake	2 Projectile points (Fig. 18e, p. 102)
7 Debatage	

Ceramics

8 Mesa Verde Black-on-white: Variety 2	4 Mancos Corrugated: Variety 1
2 Chapin Gray: Variety 1	1 Mancos Corrugated: Variety 2

42SA1823

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6000 ft. This site is located 100 ft northwest of 42Sa1822 on the same level.

Site Description, Position, Surrounding Terrain

This site is also a cave shelter. Very little cultural material was found at this site. The cave is 75 ft long at the mouth, 15 ft in depth, and 20 ft high at the mouth. The only evidence of any cultural affiliation at this site is some stones in the northern end of the cave that were laid with mud. The mortar is chinked with small

stone spalls. The depth of fill at this site is unknown but appears to be very shallow. The site appears to have had very little use.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

Vegetable Material

1 Corn stem

42SA1824

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6000 ft. This site is located one-fourth mile north of 42Sa1822 and 42Sa1823 on the west side of the canyon. It is on the same level as the road.

Site Description, Position, Surrounding Terrain

This appears to be a small granary site. Remains of two rooms are still present, and there is a possibility of a third. This site is situated in a small overhang or cavate. Negative hand prints are found on the front wall of the cave (Fig. 23a, p. 112). The rooms are constructed of course-laid masonry chinked with small stone. Finger impressions can still be seen in the clay where the walls are left standing. There is only a portion of one wall on each granary left standing.

The northernmost granary is 7 ft wide and 7½ ft long. The remaining wall is standing to a height of 2 ft. Toward the back of the room the wall is standing to a height of 3 ft 6 in.

Site Description The southernmost granary walls up portions of a large overhang that is 15 ft long at the face, 8 ft wide or deep, and has a 3½ ft high ceiling. A wall found at the northern end of this overhang is 6 ft wide and 3½ ft high with a portion of a door still visible.

Depth of fill in these rooms is from 2-4 in and is composed of clay-like material. There is no evidence of vandalism at this site. The remains of a dead fawn deer were found in each of these granaries-- a little buck in one room and a little doe in the other.

Cultural Affiliation

Cultural PII-Early PIII

Materials Collected and/or Observed

Materials Collected or Observed

6 Debatage

Ceramics

- | | |
|--|--------------------------------|
| 1 Mesa Verde Black-on-white: Variety 2 | 1 Mancos Corrugated: Variety 1 |
| 1 Mesa Verde Black-on-white: Variety 1 | |

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5800
42SA1825

Location

Mt. Linnaeus Quadrangle, Section 28, 32S, 21E. Elevation: 5950 ft. This site is located one-fourth mile south across the stream from the Wilson Ranch and due east across the canyon from 42SA1819, 20, and 21. It is on a natural high rise of ground which is bisected by a gentle, sloping gully. The site is located on the southernmost portion of the mound overlooking a small canyon that enters from the east.

Site Description, Position, Surrounding Terrain

This site consists of a circle of large boulders 12-15 in in size. This circle is 12 ft in diameter, with a fill of 2-4 in of sandy soil. A small test pit was dug in the center of the stone circle, and no evidence of habitation or use was found. It is possible that this was used as the foundation for some sort of brush shelter. Vegetation around this site is composed almost entirely of grass. This is an inaccessible area to grazing, which may account for this condition. There is also juniper and pinon.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or ObservedStone Artifacts

4 Debatage

1 Projectile point
fragment

42SA1826

3 Knife fragments

1 Use flake

39 Debatage

Location

Mt. Linnaeus Quadrangle, Section 21, 32S, 21E. Elevation: 5800 ft. This site is located due west from the Wilson Ranch cabin on the west side of the dirt road that runs past the cabin. The site is situated on a low, natural mound extending out from the talus slope to the west of the cabin. The road dissects this mound; however, in the eastern portion of the mound, there are no artifacts or any evidence of habitation.

Site Description, Position, Surrounding Terrain

The site is composed of four rooms indicated by outlines

similar to that found at 42Sa1825. These rooms or outlines are designated Units A, B, C, and D. The measurements of the units are as follows: Unit A is 16 ft 8 in in diameter. It shows some evidence of vandalism. This is the easternmost structure at this site. Unit B is connected to Unit A on the west and is 12 ft in diameter. Units C and D are located 20 ft from the west end of Unit B against a large boulder, and they are contiguous rooms. Unit C appears to have been more of a square structure. It is 10 ft long and 8 ft wide. Unit D is round and is 8 ft in diameter. This site contains little in the way of artifacts or other cultural material and could have been a seasonal use area.

Cultural Affiliation

BMIII-PI, PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts

- | | |
|-----------------------------|-------------------|
| 1 Projectile point fragment | 3 Knife fragments |
| 1 Use flake | 39 Debatage |

Ceramics

- | | |
|---|---------------------------------|
| 18 Mesa Verde Black-on-white: Variety 1 | 2 Dalton Corrugated: Variety 1 |
| 10 Mesa Verde Black-on-white: Variety 2 | 1 Mancos Ceramic Group |
| 4 Chapin Gray: Variety 1 | 11 Mancos Corrugated: Variety 1 |
| 1 Bluff Black-on-red: Variety 1 | 12 Mancos Corrugated: Variety 2 |

Materials Collected and/or Observed

Stone Artifacts

42SA1827

Location

1 Hamstone

1 Drill fragment

3 Projectile points
(Fig. 18 i-k, p. 102)

Mt. Linnaeus Quadrangle, Section 8, 33S, 21E. Elevation: 6220 ft. This site is located about 300 yds east of the old abandoned Cottonwood Ranger Station near the south end of North Cottonwood Canyon at the mouth of Hop Creek on its north side.

Site Description, Position, Surrounding Terrain

This site consists of two circular arrangements of stone and another arrangement that is difficult to discern (Fig. 7). These three arrangements of stone are very similar to the two forementioned sites-- 42Sa1825 and 26. They are situated on a little natural rise of ground, probably 20 ft above the valley floor. The vegetation is pinon, juniper, sagebrush, and other small grasses and shrubs.

These structures or outlines have been designated Units A, B, and C. Unit A is 8 ft 6 in in diameter. Unit B is 10 ft in diameter, and Unit C is roughly 5 ft in diameter. The occupation area of this site is about 100 ft by 80 ft. There appears to be a small burnt area in front of or southwest of Unit C.

Cultural material was more abundant at this site than at many of the other sites in the canyon, especially sites of this type. The time range of this site, determined by pottery types, was also more extensive than at other sites in the canyon.

Cultural Affiliation

BMIII-PI, PI-Early PII, PII-Early PIII, PIII, Late PIII

Materials Collected and/or Observed

Stone Artifacts

- | | |
|------------------|---|
| 1 Hammerstone | 3 Projectile points
(Fig. 18 <u>i-k</u> , p.102) |
| 1 Drill fragment | |

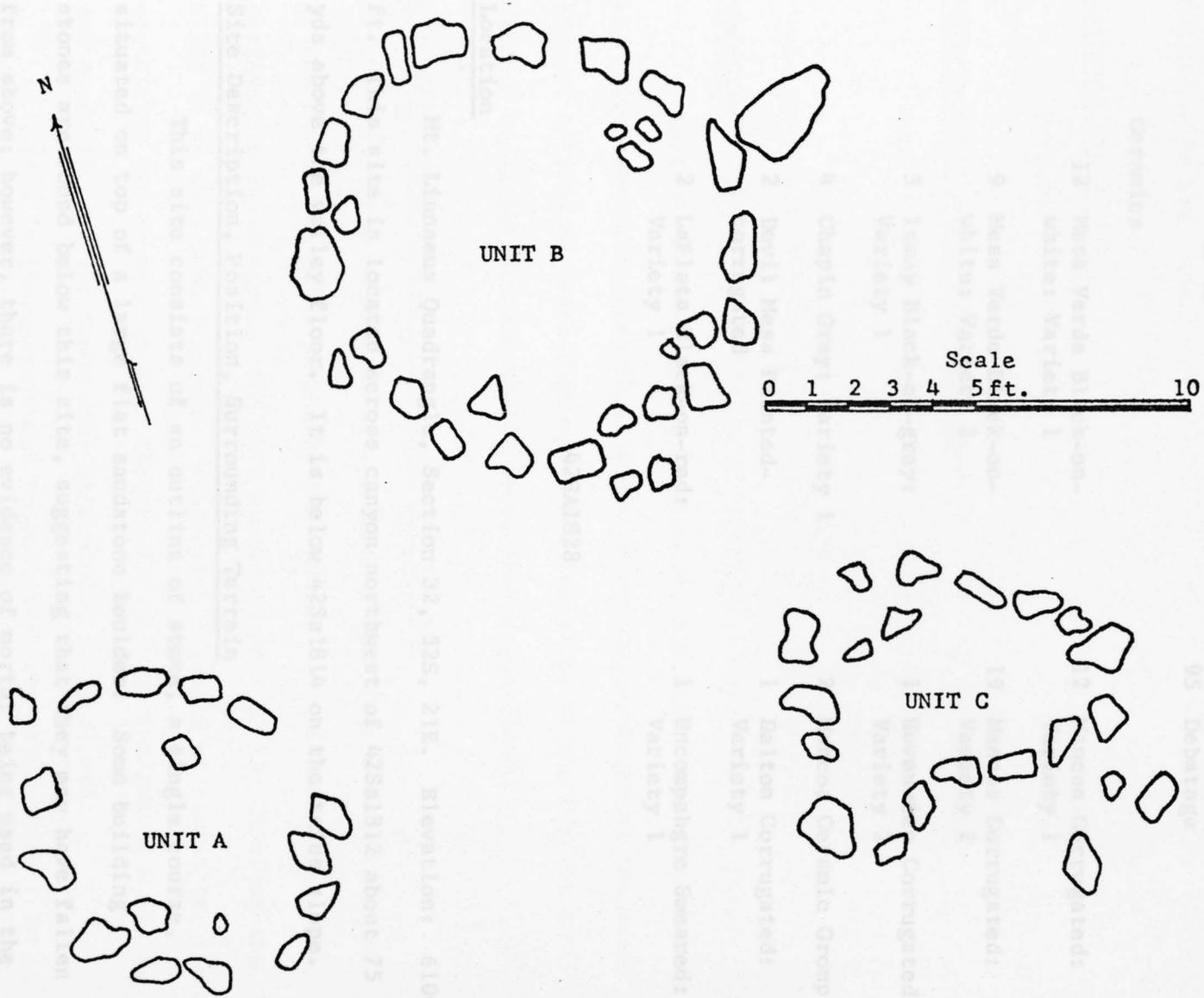


Fig. 7. Plan of 42Sal827.

3 Knife fragments (Fig. 19f, k, p. 105)

1 Use flake

95 Debatage

Ceramics

12 Mesa Verde Black-on-white: Variety 1

12 Mancos Corrugated: Variety 1

9 Mesa Verde Black-on-white: Variety 2

19 Mancos Corrugated: Variety 2

3 Ismay Black-on-gray: Variety 1

1 Hovenweep Corrugated: Variety 2

4 Chapin Gray: Variety 1

2 Mancos Ceramic Group

2 Devil Mesa Painted-corrugated

1 Dalton Corrugated: Variety 1

2 LaPlata Black-on-red: Variety 1

1 Uncompahgre Smeared: Variety 1

42SA1828

Location

Mt. Linnaeus Quadrangle, Section 32, 32S, 21E. Elevation: 6100 ft. This site is located across canyon northwest of 42SA1812 about 75 yds above the valley floor. It is below 42SA1814 on the talus slope.

Site Description, Position, Surrounding Terrain

This site consists of an outline of stone, a single course, situated on top of a large flat sandstone boulder. Some building stones are found below this site, suggesting that they may have fallen from above; however, there is no evidence of mortar being used in the construction of this structure. The outline measures 8 ft by 10 ft. The only remains of the site are those described. No cultural material was found on or below the structure. This may indicate very limited use of the site. Construction could have just begun on the site when

it was halted. Juniper, pinon, Brigham tea, serviceberry, and grasses are found on the slope.

Cultural Affiliation

Probably PII-PIII

Materials Collected and/or Observed

None

42SA1829

Location

Harts Point Quadrangle, Section 34, 31S, 21E. Elevation: 5840 ft. This site is located $2\frac{1}{2}$ mi south of the Dugout Ranch on the west side of Cottonwood Creek high up on a talus slope at the base of a cliff. It is between 700-800 ft above the canyon floor.

Site Description, Position, Surrounding Terrain

This site is located at the base of the Wingate formation and at the top of the talus formed by the Chinle. It utilizes a natural overhang in the Wingate. The site covers an area of 200 ft along the cliff in an east-west direction. This site consists of six units, each containing two or more rooms. These units will be designated A, B, C, and so forth, and the rooms will be numbered 1, 2, 3, etc.

Unit A is the westernmost component at the site. Room 1 is the easternmost room in this unit and is just a bare outline of a semi-circular or circular room. There is not enough left of the walls to take accurate measurements. Room 2 is located immediately west of Room 1 and is in a good state of repair. It measures 6 ft 1 in by 5 ft 1 in and is made of course-laid masonry chinked with small stone spalls.

Approximately one half of the roof of this room is still intact. The roof has been constructed by placing four cottonwood and juniper poles lengthwise of the room for supporting poles. There then seems to be some split juniper laid across these poles, and this is chinked with mud to form the roof. This room is 3 ft 7 in high from the top of the fill to the ceiling. It has not been determined how deep the fill is. On top of the roof of this room on the east is a wall that extends to the top of the rock overhang a distance of 5 ft 6 in. The roof of Room 2 could have been used for a little veranda or work area, or it is possible that there may have been another room on top, although there is not much evidence for a room of any size.

Immediately to the west of Room 2 is Room 3. This room is entered through an opening in the northeast corner of the roof. This opening is 16 in square, and the probable hatch stone or cover is still present on the roof. A former window on the south wall of this room has been walled up with mud and stone. Three wooden lintels remain over this window outline. There are three roofing timbers running lengthwise of the room, one of cottonwood, the other two of juniper. Small reeds or willows have been placed across these, forming a thick heavy mat, and mud has been placed on top of the willows, making a very substantial roof. In a few instances, there is still binding on the roof beams where the willows have been bound. In one instance, yucca leaves have been wrapped around the roof beams to suspend objects. They may have been loom anchors. The yucca cords are tied with a square knot, but were cut, possibly when the area was abandoned, in order to remove whatever they were supporting. There are also a number of small sticks that have been placed in the mortar of the wall and are

sticking out 5-6 in into the room. These may also have been used to suspend or hang objects. This room has utilized a little natural bench or shelf along the back of the north wall. There is also a small hole at the floor level in the south-southeast corner of the room which appears to have been used as an entryway to the room or as a ventilator hole. A wall extends straight out from the small vent hole toward the edge of the cliff for 4 ft. This is a very low wall, possibly constructed as a support to build up a low spot in the cliff.

Room 4 is located immediately west of Room 3 and is just an outline. Like the other rooms in this unit, it utilizes the cliff as the back wall of the room. It is 11 ft in length and from 3 ft 6 in to 5 ft in width. No features are present.

Room 5 is located in front of Room 4 and is also a faint outline of a room. It appears to be a circular structure roughly 7 ft in diameter. The front wall of this room is on the very edge of the cliff.

Unit B begins just about 10 ft east of Unit A and begins with a fallen room. A large amount of roofing material and building rubble is evident. Part of the walls appear to have fallen eastward into the room. Part of the wall has also fallen over the cliff. The room is 9 ft deep from the cliff face out to the cliff edge and 7 ft wide.

Much of Room 2 of Unit B has also fallen in. A portion of the west wall is standing. It is 3 ft 9 in tall and 2 ft 10 in wide and appears to end at a doorway. The rest of the room up to the doorway appears to have fallen off the cliff. The other side of Room 2 has the wall remaining, and it has a doorway through it. It may have been a passageway from Room 2 to Room 3, as the front wall of Room 3 fronts on the cliff and would have made it impossible to go from one room to

another without going through this room. The wall extends out from the cliff wall for 3 ft. The door is 2 ft wide, and there is another 2 ft of wall before it drops off the cliff. The wall is 3 ft high.

Room 3 is 10 ft in length and 7 ft wide from the cliff wall to the face of the cliff. The front portion of this room has fallen over, leaving only a portion of a 12-in wall. Along the front of this room is a large amount of timber and roof fill. The timbers include both pine and juniper. The pine poles appear to have been used as the main supporting beams, as there are two still in place. The juniper was used as cross pieces for the roof. The two roof beams still in place are in good condition and are 5 in in diameter.

Room 4 of this unit is 4 ft wide and 6 ft deep from the back of the cliff wall to the cliff face. It also has a portion of the roof still intact. The roofing on this room is unusual, as it has been placed on the roof at a 45 degree angle, covering only the northeast corner of the room. This could have been done purposely in order to provide a shade in this room. The poles are long, and it could be that they were laid at an angle in order to utilize them for this roof. Had they been placed in a conventional manner, they would have been much too long. As with some of the other rooms at this site, the front part of this room has fallen over the edge of the cliff.

Unit C begins 20 ft east of Unit B, and between them is a narrow trail along the cliff; on the cliff face are a number of scratches and grooves that cause it to look like a sharpening or grinding area. These are composed of perpendicular grooves ground or worn in the cliff and could have been used to sharpen tools, smooth sticks, or maybe even polish or shape jewelry.

Unit C is probably the most exciting in this site. It is composed of a number of rooms or structures, and one of these is a three-story tower ruin (Figs. 8 and 9). Room 1 is the westernmost room in this unit. Its doorway is 21 in wide and 28 in high. The wooden lintel over the doorway almost appears to be a 3/4-in plank, it is shaped so well. It has probably been split from a juniper. The measurements for this room are 6 ft 8 in deep and 7 ft 8 in wide. It still has five roof timbers remaining, although that is the only roofing material present except a few stones perched precariously above the door.

The tower, including Rooms 2, 3, and 4, is located immediately east of Room 1. The bottom room of the tower is entered from the east through a doorway 15 in wide and 26 in tall with two small willow lintels beneath a rock slab lintel. The room is 6 ft 8 in deep and 6 ft 3 in wide. There are five roof timbers in this room running east and west and a large amount of willows laid crosswise of the timbers to form the roof of the room.

The roof of Room 2 forms the floor of Room 3 above it. The depth of this room is 4 ft 6 in from the roof down to the fill on the floor. There is only 4-6 in of fill on the floor above the bare sandstone. The doorway in Room 3 faces north toward the back of the cliff. There is a passageway between the tower and the cliff face. The doorway is 23 in wide and 22 in tall. There are seven wooden lintels above it that appear to be tied together with yucca fibers. This doorway is wider than most and has a nice stone sill on the bottom. The inside measurements of Room 3 are 5 ft 9 in by 6 ft. Its roof has an unusual construction. Four sets with two poles in each set, or two poles side by side repeated four times running east and west, form the



Fig. 8. Three-story tower ruin at 42Sal829 looking east.

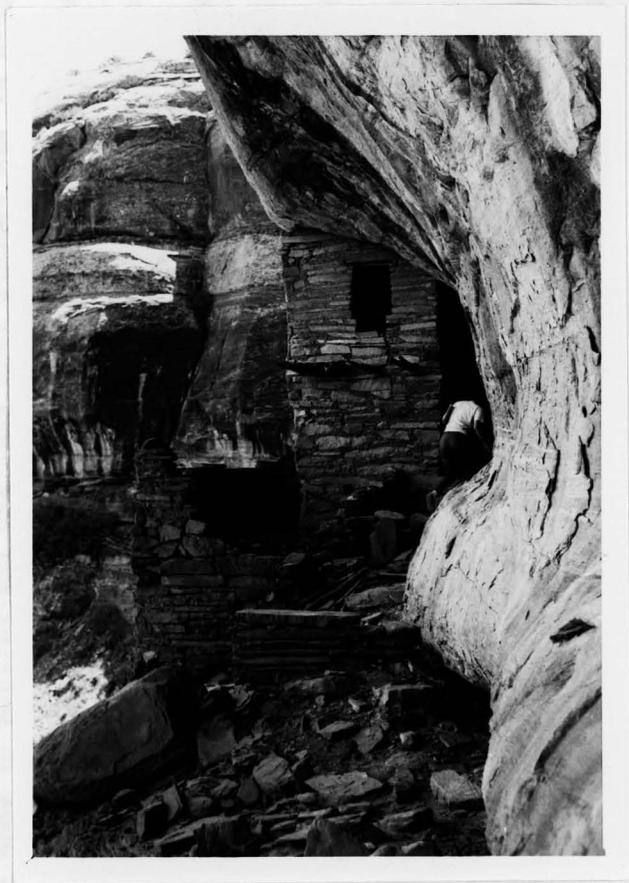


Fig. 9. Three-story tower ruin at 42Sal829 looking west.

roof timbers. There are then willows and small diameter sticks running crossways of these timbers forming the roof of this room and the floor of the room above it.

Room 4 has a T-shaped doorway facing east which is 32 in high and 20 in wide down to the shoulder. At the shoulder it is 15 in wide. Only one lintel is found above it, although it appears that some of the other lintels could have fallen out. The measurements for this room are the same as the room below, 5 ft 9 in by 6 ft. The roof of this room is the roof of the cave or overhang. The entire structure is constructed of course-laid masonry. A balcony runs along the east wall down 17 in from the bottom of the T-shaped doorway, and this utilized the four sets of two timbers each that are the ceiling of Room 3.

Room 5 is a small, irregularly shaped room immediately to the east of the tower structure. This room has no roof and is evidenced only by portions of the walls that are left standing. It is 2 ft 3 in wide and 3 ft long.

Rooms 6 and 7 adjoin the tower structure on the southeast corner, but are below it, so that the roof of these two rooms forms a small veranda or outside use area. A veranda wall on the roof of these two structures stands to a height of $2\frac{1}{2}$ ft. Room 6 is an irregularly shaped room 7 ft 4 in long and 4 ft 8 in wide at the widest point. It has five roof timbers spaced fairly close together running lengthwise of the room. This room has been vandalized quite badly. It is 4 ft 6 in from the ceiling to the floor fill. Room 7 is east of and adjoining Room 6. It is 6 ft 2 in long and 4 ft 10 in wide. Roof construction is the same as that found in Room 6, but is not in as good condition.

Unit D is located 40 ft east of Unit C and appears to be composed of a storage bin and a small square room with a ventilator shaft. The remains of a larger room are located at the east end of this unit. Room 1, the storage bin, is 3 ft 5 in square and is located on the west end of the unit at a little higher level. The floor of this structure is even with the roof of the other two rooms in the unit. The roof timbers for Room 2 in this complex extend in and form the floor of the granary, Room 1.

Room 2 is 12 ft 2 in long and 7 ft 6 in wide. A ventilator shaft is found in the southeast corner of this room and is 1 ft by 1 ft 5 in inside measurement. It is filled with rubble and vegetable material. Room 3 is 16 ft 9 in in length and 7 ft 6 in wide. The front wall has fallen from the room, and it is full of building rubble composed of roof timbers and what appears to be split juniper poles and small twigs and sticks used in the construction of the roof. A number of these timbers could possibly be used for dendrochronology samples. A large number of building stones from the walls are in the room mixed with the rubble. Above the rooms in this unit is a pictograph panel on the cliff face that has been executed in red and white pigments (Fig. 25b, p. 114). Some sharpening grooves are located just to the west of the storage bin or Room 1 in this unit.

Unit E is directly below Unit B on another level of the cliff and is composed of three rooms. This unit is constructed of course-laid masonry, although the rooms are full of fill and rubble. Room 1 is an irregularly shaped room situated so that the back wall utilizes the cliff face. The room is roughly 8 ft by 5 ft. Room 2 is located directly east of Room 1 and is an irregularly shaped room, roughly "D"

shaped. It is 5 ft 4 in at the widest point and extends out from the cliff 4 ft 6 in. The west wall of Room 2 and the east wall of Room 1 are the same.

Room 3 is situated immediately to the front or south of Room 1 and utilizes the front wall of Room 1 for its back wall. It is also irregular in shape. It measures 8 ft along the back wall, 6 ft 6 in on the front wall and is 4 ft 2 in wide. Directly below this unit is another small area that has been utilized. A crack in a rock has been partially walled up and appears to have been used as a storage area. A large amount of vegetable material is located in this crack, including corn cobs and material probably packed in by rodents.

Unit F is composed of two dry-laid stone structures located on a level below the tower ruin and slightly to the east. Both of these rooms are in very bad repair, making it impossible to take measurements. It may have been that they were not rooms, but retaining walls constructed to hold the soil back from the cliff, as it drops off again at this point.

Cultural Affiliation

Late PII-Early PIII, PIII

Materials Collected and/or Observed

Stone Artifacts, Chipped

2 Hammerstones

16 Debatage

Stone Artifacts, Ground

1 Polishing or burnishing stone

Ceramics

- | | |
|---|-----------------------------------|
| 2 Mesa Verde Black-on-white: Variety 1 | 1 Hovenweep Corrugated: Variety 2 |
| 12 Mesa Verde Black-on-white: Variety 2 | 2 Hovenweep Corrugated: Variety 3 |
| 1 Mustang Black-on-white: Variety 2 | 8 Mancos Corrugated: Variety 1 |
| 1 Dalton Corrugated: Variety 1 | 9 Mancos Corrugated: Variety 2 |
| 1 Menefee Gouged: Variety 2 | |

Bone

- 1 Unidentified bone fragment

Vegetable Material

- | | |
|--------------------|-------------------------------|
| 2 Corn stems | 1 Unidentified corn cob |
| 4 8-row corn cobs | 1 Squash rind |
| 2 10-row corn cobs | 1 Juniper cord, twisted |
| 3 12-row corn cobs | 1 Possible piece cotton fiber |

SUMMER 1968 SURVEY SITES

There were no diagnostic artifacts found at any of the following sites; therefore, no cultural affiliation is assigned. Due to some unfortunate circumstances, the artifacts from these sites were mixed together in the laboratory, and so cannot be listed by site. Artifacts found are listed below. All are chipped stone artifacts.

- | | |
|--|---------------------------------|
| 2 Use flakes | 4 Chipped stone blade fragments |
| 1 Projectile point (Fig. 18g, p. 102) | 1 Possible dart point fragment |
| 7 Projectile point fragments (Fig. 19h, i, p. 105) | 1 Scraper |
| | 323 Debatage |

42SA1830

The vegetation is composed of juniper, pinon, sage, and various grasses.

Previous Designation

Site 1, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 5, 33S, 20E. Elevation: 7360 ft. This site is located on the top of Salt Creek Mesa to the north of the road.

Site Description, Position, Surrounding Terrain

This site is an open seasonal hunting camp or temporary stop. The site is identified by the open area exhibiting evidence of fire, as well as an abundance of stone chips and flakes and broken chipped stone tools. The vegetation is composed of sage, juniper, and pinon, and various wild grasses. The soil or depth of deposit is very shallow.

42SA1831

Previous Designation

Site 2, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 5, 33S, 20E. Elevation: 7358 ft. This site is located on Salt Creek Mesa to the north of the road and one-half mile northeast of 42Sa1830.

Site Description, Position, Surrounding Terrain

This is an open seasonal hunting camp or temporary stop. An abundance of red chalcedony, white quartz, and agate chips and flakes were found, as well as some large stock of this same material. This

area is not suitable for farming due to the lack of water in the area. The vegetation is composed of juniper, pinon, sage, and various grasses. Depth of deposit at the site is very shallow. The area covered at the site is approximately 30 ft.

42SA1832

Previous Designation

Site 3, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 4, 33S, 20E. Elevation: 7300 ft. This site is located on Salt Creek Mesa to the north of the road and one-half mile south of 42SA1831.

Site Description, Position, Surrounding Terrain

This is an open seasonal hunting camp or temporary stop. An abundance of red chalcedony and quartz flakes were found, indicating the possibility of tool manufacturing activities. The vegetation is composed of juniper, pinon, sage, and various grasses. Depth of deposit at the site is very shallow. The area covered at the site is approximately 25 ft.

42SA1833

Previous Designation

Site 4, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 9, 33S, 20E. Elevation: 7350 ft. This site is located on Salt Creek Mesa to the south of the road,

one mile southeast of 42SA1832.

Site Description, Position, Surrounding Terrain

This site is an open seasonal hunting camp, temporary stop, or tool manufacture area. An abundance of red chalcedony, white quartz, and agate chips were found. Small flakes were found, but no larger ones. The vegetation is composed of juniper, pinon, sage, and various grasses. Deposit at the site is very shallow. The area covered at the site is approximately 30 ft.

42SA1834

Previous Designation

Site 5, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 29, 32S, 21E. Elevation: 6250 ft. This site is located on the mesa above North Cottonwood Canyon, 150 yds south of the road.

Site Description, Position, Surrounding Terrain

This site is an open seasonal hunting camp or temporary stop and tool manufacturing site. Chips and flakes of chalcedony, quartz, and agate were found, as well as some broken tools. One complete arrow point was also found. The vegetation is composed of juniper, pinon, sage, and various grasses. Depth of the deposit at the site is very shallow. The area covered at the site is approximately 30 ft.

42SA1835

Previous Designation

Site 6, Summer 1968 Survey

Location

Mt. Linnaeus Quadrangle, Section 29, 32S, 21E. Elevation: 6250 ft. This site is located on the mesa above North Cottonwood Canyon, south of the road, and 150 yds west of 42Sa1834.

Site Description, Position, Surrounding Terrain

This site is an open seasonal hunting camp, temporary stop, or tool manufacturing site. Chips of chalcedony, quartz, and agate were found. The vegetation is composed of juniper, pinon, sage, and various grasses. Depth of the deposit at the site is very shallow. The area covered at the site is approximately 25 ft.

Clay is a very plastic medium with which to work, and pottery vessels made from clay reflect changes in cultural traits, both temporally and spatially. Because of the durability of pottery after firing, these changes are retained and preserved for all time. Because pottery is very fragile, there is constant breakage, which leads to frequent manufacture of new pieces, which accelerates the rate of technical change. Because of the frailty on the one hand, and the durability on the other, coupled with the knowledge that large amounts were manufactured, used, and broken, an archaeologist generally finds more pottery at a site than any other one type of artifact (Colton and Hargrave 1937:Introduction)

Other cultural factors, such as implements of bone and stone,

Chapter 5

MATERIAL CULTURE

CERAMICS

In the present status of Southwestern archaeology, ceramics is the one cultural factor that can be studied at almost every site, even sites that have not been excavated (Colton and Hargrave 1937:Introduction).

In reading archaeological site reports from the Southwest, the uninitiated might feel that Southwestern archaeologists are concerned more with pottery than anything else. This, in a sense, has an element of truth to it, but for reasons that are described below.

Clay is a very plastic medium with which to work, and pottery vessels made from clay reflect changes in cultural traits, both temporally and spatially. Because of the durability of pottery after firing, these changes are retained and preserved for all time. Because pottery is very fragile, there is constant breakage, which leads to frequent manufacture of new pieces, which accelerates the rate of technical change. Because of the frailty on the one hand, and the durability on the other, coupled with the knowledge that large amounts were manufactured, used, and broken, an archaeologist generally finds more pottery at a site than any other one type of artifact (Colton and Hargrave 1937:Introduction).

Other cultural factors, such as implements of bone and stone,

are not nearly as sensitive to stylistic change as are ceramics. Textiles are very sensitive, but, because of their scarcity due to lack of preservation, it is difficult to use this material on which to construct a chronology. Architecture is also sensitive and has contributed to our knowledge of stylistic change, but is still less sensitive than pottery.

Keeping the above in mind, it is possible to realize the value of ceramics in recognizing cultural change, both temporally and spatially, during various stages of Pueblo cultural evolution. In the beginning, recognition of these stages of cultural development came through the recognition and use of stratigraphy. The stages were subsequently dated by means of dendrochronology, or tree-ring dating.

Dendrochronology was developed by A. E. Douglass in 1913 as a result of his studies concerning the correlation of tree-growth patterns with sun spot occurrences (Meighan 1966:24). During years of abundant moisture, trees produce wider growth rings, while, during dry years, narrower rings are produced. By comparing tree-ring samples at an archaeological site (i.e. roof beams, posts, etc.) with a master chart showing the ring pattern through time for a particular geographic area, a building phase at a given site can be determined within a year or two (Meighan 1966:24). Pottery found at various sites dated by dendrochronology can then be dated and assigned a position in a sequential stage.

The importance of dendrochronology in dating Southwestern pottery types as well as other archaeological manifestations is clearly stated by Breternitz (1966:1).

Dendrochronology, the science of tree-ring dating, provides Southwestern archaeology with a chronological technique that is

both unique and absolute. It is small wonder that archaeological applications and interpretations of tree-ring dates have been developed and most intensively used for the "dating" of various aspects of prehistory in the southwestern United States. The absoluteness of a tree-ring date applies only to the tree-ring specimen itself. Through the interpretation of the archaeological context and association, we are able to use tree-ring specimens to "date" certain prehistoric events and to state, with some degree of validity, that certain archaeological manifestations, whether they be sites, cultural stages, or pottery types, occur within a certain bracket or period of time.

Most types of pottery found in North Cottonwood Canyon have previously been dated dendrochronologically. A discussion on each, taken from Breternitz (1966), follows. Table 1 shows the symbols used in the discussion.

Table 1. Symbols used in conjunction with tree-ring dates.

Symbol	Definition
B	Bark present, definite cutting date
+	Outer rings crowded, probably some absent in series
+x	Last ring on specimen, unknown number of rings lost
vv	Last ring very variable around circumference, probably many rings lost
r	Outer ring constant over significant portion of the circumference, probable cutting date
C	Last ring constant around circumference, probable cutting date

Bluff Black-on-red

Validity of tree-ring dating. The two tree-ring dates of 847B and 993+ only suggest that Bluff Black-on-red spans the 850 to 1000 time period; therefore, in the absence of better evidence, it is not feasible to alter Abel's (1955) dates of 800 to 900.

La Plata Black-on-red

Range and clusters of tree-ring dates. Indigenous--675 to 872; best

between about 850 and 872. Trade--636+x to 993+; best(?) between 850 and 900.

Validity of tree-ring dating. The dates that Abel (1955) gives for La Plata Black-on-red of about 800 to 1000 may be correct, but the tree-ring evidence indicates 850 to 900 as the period of greatest occurrence.

Chapin Gray

Range and clusters of tree-ring dates. Indigenous--354+x to 847B; best between 610 and 847. Trade--there is a single occurrence from a site occupied about 900.

Validity of tree-ring dating. The tree-ring evidence indicates that Chapin Gray dates from at least 610 until about 850. Chapin Gray lasted as trade in a site occupied about 900. Abel's (1955) beginning date of 450 is not supported by the tree-ring evidence.

Twin Trees Plain

Validity of tree-ring dating. Since the tree-ring dating is very weak, we can say only that this type is found in sites which date from the late 500's until about 900. Even though Abel (1955) dates Twin Trees Plain as about 450 to 850, the tree-ring evidence does not support the 450 beginning date.

Moccasin Gray

Validity of tree-ring dating. Although all the tree-ring dates are in the last half of the 800's, which would indicate that Moccasin Gray was present between 850 and 900, Abel's (1955) dates of 800 to 900

should be considered as more accurate for the total life-span of the type.

Chapin Black-on-white

Range and clusters of tree-ring dates. Indigenous--354+x to 847B; best between 610 and 847.

Validity of tree-ring dating. There is no tree-ring evidence to indicate that Chapin Black-on-white begins before about 600, although Abel (1955) suggests about 500. The Fifth Southwestern Ceramic Conference (1963) has proposed dates of 587vv to 900; however, the present tree-ring evidence suggests that this type lasted until 850, and was most abundant in the 600's.

Twin Trees Black-on-white

Range and clusters of tree-ring dates. Indigenous and trade--675+ to 898r; best(?) in the 800's.

Validity of tree-ring dating. Considering the poor tree-ring evidence, we can only say that Twin Trees Black-on-white appears during the 800's. The present information, which suggests a beginning date of about 600, does not support Abel's (1955) early beginning date of about 450.

Mancos Corrugated

Range and clusters of tree-ring dates. Indigenous--1066 to 1090C.

Validity of tree-ring dating. All the tree-ring dates are in the late 1000's; consequently, there is no indication of the total time span for this type.

Mesa Verde Corrugated

Range and clusters of tree-ring dates. Indigenous--993+ to 1274; best between about 1200 and 1274.

Validity of tree-ring dating. Abel's (1955) dates of about 1200 to 1300 are substantiated by the tree-ring evidence.

Cortez Black-on-white

Validity of tree-ring dating. Since the only comment possible is that Cortez Black-on-white occurs as trade in a site occupied around 900, no improvement can be made on Abel's (1955) date of 900 to 1000.

Mancos Black-on-white

Range and clusters of tree-ring dates. Indigenous--911+ to 1192+; best between 1075 and 1125.

Validity of tree-ring dating. The beginning date of Mancos Black-on-white is not well established by the tree-ring evidence, but it apparently begins in the 1000's; at least by 1075. It lasts until about 1200 with its period of greatest abundance between 1075 and 1125. The Fifth Southwestern Ceramic Conference (1963) gives dates of 950 to 1200 for Mancos Black-on-white in the Mancos area and 1050 to 1200 for the type on Wetherill Mesa.

McElmo Black-on-white

Range and clusters of tree-ring dates. Indigenous--957+ to 1275; best from about 1090 to 1275.

Validity of tree-ring dates. The tree-ring evidence suggests a life-span for McElmo Black-on-white from about 1090 until at least 1250, and possibly until 1275; this agrees essentially with the dates of 1050 to 1250 proposed by the Fifth Southwestern Ceramic Conference (1963).

Mesa Verde Black-on-white

Range and clusters of tree-ring dates. Indigenous--828 to 1284; best between 1030 and 1284. Trade--1051 to 1612+; best between 1270 and 1340 plus or minus.

Validity of tree-ring dating. Although a good number of sites that produce Mesa Verde Black-on-white also have tree-ring dates, this pottery type is not well dated because of poor information regarding its archaeological associations. The available tree-ring material corroborates Abel's (1955) dates of about 1200 to 1300, but there is a possibility that it begins before 1200.

Type: Variety Mode Conceptual Approach

The Type: Variety Mode Conceptual Approach to ceramic analysis is a system that has been developed through the work, trial, and error and contributions of a number of people. "This approach is a systematic taxonomic technique designed for the classification of ceramic materials" (Forsyth 1972:29).

Until Forsyth (1972) utilized this approach in analyzing the ceramic material from Montezuma Canyon in southeastern Utah, this approach had not been used to any great extent in this part of the Southwest. The ceramics described in this report were analyzed using the same approach as proposed by Forsyth. This approach will be used

not because I entirely agree with the group, type and variety names or designations proposed by Forsyth, but because I feel there is need for uniformity in ceramic classification and merit in the Type: Variety Mode Conceptual Approach. It is also not the purpose of this report to evaluate or change a ceramic classification system, but to find an approach with which to analyze and say something about the ceramics of North Cottonwood Canyon, southeastern Utah.

For the benefit of the reader, Forsyth's (1972) classification scheme is presented in Table 2, as well as the old names for the various wares, groups, types, and varieties for ceramics of the northern San Juan Anasazi region.

For additional information on the Type: Variety Mode Conceptual Approach to Ceramic Analysis, the reader is invited to read Gifford (1960, 1963), Matheny (1970), Phillips (1958), Phillips and Gifford (1959), Smith, Willey, and Gifford (1960), and Wheat, Gifford, and Wasley (1958).

Temporal Distribution

The pottery recovered in North Cottonwood Canyon is overwhelmingly of the Mesa Verde tradition and demonstrates a time span ranging from BMIII-PI to Late PIII. There are 67 sherds falling within the BMIII-PI time period which account for only 4.4% of the total. This includes only 3 (.2%) sherds from the Abajo Ceramic Group and 64 (4.3%) from the Chapin Ceramic Group. Chapin Gray: Variety 1 is the most common, followed by Ismay Black-on-gray: Variety 1.

Sherds falling within the PII-PIII time period number 1475 and account for 94% of the total sherd count. This includes 559 (35.6%) sherds from the Mancos Ceramic Group and 860 (54.5%) from the Mesa Verde

Table 2. A tentative ceramic classification for the northern San Juan Anasazi region.

Forsyth Designation		Old Name
<u>SAN JUAN RED WARE</u>		<u>SAME</u>
Abajo Ceramic Group	Abajo Red-on-orange: Variety 1 Hermano Polychrome: Variety 1 Bluff Black-on-red: Variety 1 La Plata Black-on-red: Variety 1	Abajo Red-on-orange Abajo Polychrome Bluff Black-on-red La Plata Black-on-red
<u>MONTEZUMA GRAY WARE</u>		<u>MESA VERDE GRAY WARE</u>
Chapin Ceramic Group	Chapin Gray: Variety 1 Chapin Gray: Variety 2 Moccasin Neck-banded: Variety 1 Rincon Neck-banded: Variety 1 Ismay Black-on-gray: Variety 1 Ismay Black-on-gray; Variety 2	Chapin Gray Twin Trees Plain Moccasin Gray (in part) Mancos Gray (in part) Chapin Black-on-white Twin Trees Black-on-white
Mancos Ceramic Group	Mancos Corrugated: Variety 1 Mancos Corrugated: Variety 2 Mancos Corrugated: Variety 3 Cannonball Incised: Variety 1 Uncompahgre Smeared: Variety 1 Uncompahgre Smeared: Variety 2 Menefee Gouged: Variety 1 Menefee Gouged: Variety 2	Mancos Corrugated (in part) Mancos Corrugated (in part)
Dalton Ceramic Group	Dalton Corrugated: Variety 1	Mesa Verde Corrugated (in part)

Table 2 (continued)

Forsyth Designation		Old Name
Hovenweep Ceramic Group	Hovenweep Corrugated: Variety 1 Hovenweep Corrugated: Variety 2 Hovenweep Corrugated: Variety 3	Hovenweep Corrugated (in part) Hovenweep Corrugated (in part) Hovenweep Corrugated (in part)
<u>MONUMENT WHITE WARE</u>		<u>SAN JUAN WHITE WARE</u>
Mustang Ceramic Group	Mustang Black-on-white (Variety 1?) Mustang Black-on-white (Variety 2?)	Cortez Black-on-white Mancos Black-on-white
Devil Mesa Ceramic Group	Devil Mesa Painted-corrugated Towaoc Painted-smearred Cajon Painted-gougred	New Type New Type New Type
		<u>MESA VERDE WHITE WARE</u>
Mesa Verde Ceramic Group	Mesa Verde Black-on-white: Variety 1 Mesa Verde Black-on-white: Variety 2	McElmo Black-on-white Mesa Verde Black-on-white

Ceramic Group. Fifty-five sherds (3.6%) representing the Dalton, Hovenweep, Mustang, and Devil Mesa Ceramic Groups were identified. One sherd of Tusayan Polychrome accounted for the remaining material dating to this time period.

There are 25 unidentified pieces for 1.6%. Table 3 shows the number and types of sherds found at each site and their percentage of the total.

The study of ceramics from the area indicates that the minimum time span represented is from c. A.D. early 800's to 1250, although the occupation probably started somewhat earlier and may have lasted a little later, with the major occupation occurring between A.D. 1050 to 1200 or Late PII-Early PIII.

The sample and percentages represent totals of surface collections only. If excavations were conducted at selected sites such as 42Sa1806, 1808, 1809, 1812, 1816, 1822, and 1827, the percentages may change somewhat, especially percentages for the earlier periods.

ARCHITECTURE

As mentioned previously, architecture is an indicator of social change. In various areas within the Anasazi cultural area, the evolution of architecture from simple masonry granaries to multi-roomed houses can be seen. During the BMII time period, architecture was very simple, consisting of slab-lined storage cists. Houses made of wood set in mud mortar constructed over saucer-shaped depressions have been recorded (Rouse 1962:37).

During the following period known as BMIII, the people became somewhat sedentary due to greater emphasis on agriculture, and they

began to build pit dwellings lined with stone slabs (Rouse 1962:37-8). These people lived in villages of irregularly grouped pit houses with granaries clustered between them. Toward the end of this period, surface houses began to make their appearance in some areas. "Villages have been excavated in which separate pit houses were still used for living quarters, but there were also some dwellings which were above ground and had contiguous rooms" (Wormington 1964:52).

During the PI and PII time periods, the first villages of rectangular habitation structures of true masonry were made. In fact, the changes in architecture from the Basketmaker era and Pueblo times mark the transition between these two time periods. Although the trend was towards contiguous-room dwellings constructed above ground, ". . . some dwellings continued to be dug into the ground. . . . Some were still made of slabs; others, of adobe bricks, wattle-and-daub construction, masonry, or various other techniques" (Rouse 1962:38). In short, the PI time period was a period of experimentation in house types.

During the PIII time period, architecture reached its peak of maturity. Throughout much of the Anasazi cultural area are found remains of multi-storied masonry structures built in large overhangs in the cliffs. Many of these structures were made of dressed stone and mud chinked with small stones, giving the appearance of skillful execution.

The above description of architecture found within the Anasazi cultural area is by no means a description of all of the architecture found and recorded within the area. It is presented in order to give the reader an idea as to the evolution of architecture and the possi-

bilities inherent in establishing distinctive periods of development through its study. The major problem in establishing chronology through architecture, or any other cultural materials, is that, although there appears, at least in reading descriptions of various cultural time periods, to be much uniformity in architectural development, some areas seem to be characterized by the lack of uniformity. Due to lack of culture contact or possibly reluctance in accepting change, architectural development during various phases or time periods did not take place at the same time even within a limited geographical area. So, while in some areas large multi-roomed pueblos were being constructed, in peripheral areas less change was noted. Architectural types recorded during the survey of North Cottonwood Canyon are grouped into the following categories.

Uncoursed, Wet-laid Masonry

The masonry is of irregularly shaped spalls set in adobe mortar. The spalls vary greatly in size and show little or no evidence of deliberate shaping or coursing. Small stones were used as chinking material. All structures exhibiting this type of architecture appear to have been storage units (42Sal801, 1804, 1813 Fig. 107, 1817, and 1818). All doorways in structures falling within this type were rectangular and exhibited either sandstone and willow or sandstone lintels. All doorways had sandstone sills.

Coursed and Shaped Wet-laid Masonry

The spalls used in the masonry were not as carefully shaped nor laid in regular rows as is the masonry of classic Mesa Verde, although some of the architecture at 42Sal829 appears equal to much of the Mesa



Fig. 10. Uncoursed, wet-laid masonry storage unit--42Sa1813.



Fig. 11. Kayenta-like architecture at 42Sa1829.

Verde material. In contrast, one structure at 42Sal829 (Fig. 11) exhibits architecture similar to the Kayenta area with undressed stone and an abundance of mortar. The walls in this case were not as straight nor plumb as in the former. Architecture at other sites in the canyon seems to fall between these styles. Shaping of stones in most instances was limited to making the interior and exterior wall surfaces even, and small stones were used for chinking. In one instance (42Sal812), rounded river cobbles were used as building stone. It would be difficult to determine if many of the structures were plastered, due to the erosion that has taken place. At 42Sal806 and 1812, walls exposed as a result of vandalism showed evidence of having been plastered. It was difficult to determine whether these were inside or outside walls.

Doorways were rectangular and T shaped. T-shaped doorways exhibited both sandstone and willow (Fig. 9, p. 71) and sandstone slab lintels (Fig. 12). Of the four rectangular doorways found associated with this type of architecture, each had a different lintel treatment. They included willow (Fig. 13), sandstone and willow, sandstone, and in one instance (42Sal829), it appears that a beam or post had been split, making a plank. This plank with a sandstone slab above it formed the lintel. At a few sites, thin sandstone slabs shaped to fit the rectangular entranceways were observed (Fig. 14).

Dry-laid Masonry

This type of masonry shows up at two sites (42Sal801 and 1820) and appears to have been utilized in constructing a retaining wall or windbreak. It is difficult in some instances to determine whether a structure was dry or wet laid because of the weathering that has taken

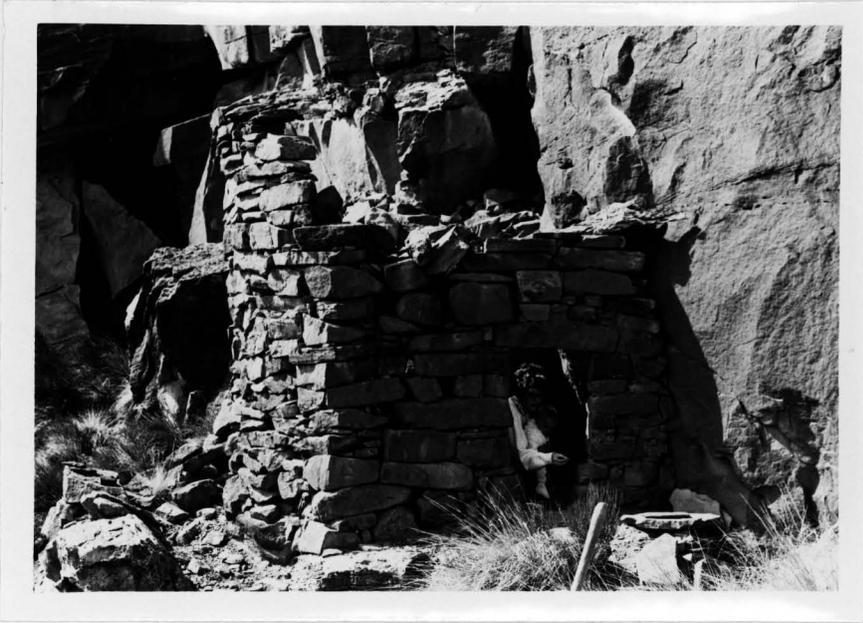


Fig. 12. T-shaped doorway with sandstone slab lintel at 42Sa1820.



Fig. 13. Rectangular doorway with willow lintel at 42Sa1829.



Fig. 14. Rectangular doorway with dressed stone slab at 42Sa1813.



Fig. 15. Vertical sandstone boulders at 42Sa1816.

place.

Stone Rings or Alignments

Three sites (42Sal825, 1826, and 1827) consist of one or more stone ring alignments one course high. No other evidence of building stone was found at these sites. These stone rings could have been used as the base stones for a brush shelter or windbreak. At two other sites (42Sal815 and 1828), rectangular stone alignments one course high were found on large sandstone boulders. They could have been used as small retaining walls or windbreaks. Little additional building stone was found in the immediate vicinity.

Forms of architecture not fitting the norm within the canyon include sandstone slabs on edge forming the base of a granary with course-laid masonry forming the remainder of the wall. At 42Sal816 (Fig. 15), large sandstone boulders are standing vertically and appear to form the base for a structure. There is no further evidence to indicate the method of construction used to complete the room.

Site 42Sal800 is a suspected BMIII slab-lined granary, as is evidenced by portions of sandstone slabs sticking above the ground. This is the only site of this type found during this survey.

Circular structures that may have been kivas were found at 42Sal812 (Fig. 6, p. 41) and 1820. At 1812, these are evidenced by circular depressions with building rubble around a portion of the outside indicating possible above-ground rooms.

Site 42Sal829 exhibited the best quality as well as the best preserved architecture found within the canyon.

STONE ARTIFACTS

Ground and Pecked Stone

Metates. Two metates were found during the survey. They are classified solely on the basis of the shape of the grinding surface in relationship to the whole stone. They fall within two types and are classified as follows.

1.. Utah-type metate (Fig. 16), in which the trough is deep and open on one end. A small shelf or basin has been shaped on the kneeling end and was probably used as a depository for the mano when not in use. This metate is much like the metates found in parts of the Fremont culture area to the north and west of the canyon.

2. Shallow-trough metate (Fig. 17a), in which the groove or trough is very distinct but is not circular nor open ended.

Manos. Five whole or fragmentary manos were collected or observed during the survey. Only two can be classified. One is a one-handed unifaced ovoid mano made of fine-grained sandstone (Fig. 17b). The other is a thin two-handed bifacial rectangular mano made from a fine-grained conglomerate probably from the Moss Back member (Fig. 17c). All other fragments of manos collected in the canyon were made of either sandstone or conglomerate.

Miscellaneous. A gray siltstone pendant (Fig. 18a) was found at site 42Sal806 and is the only jewelry or decorative artifact found during the survey. One arrow shaft smoother fragment (Fig. 18b) was found at 42Sal807 and is the only one of its kind found during the survey.

Flaked Stone

Nine classifiable projectile points were collected during the

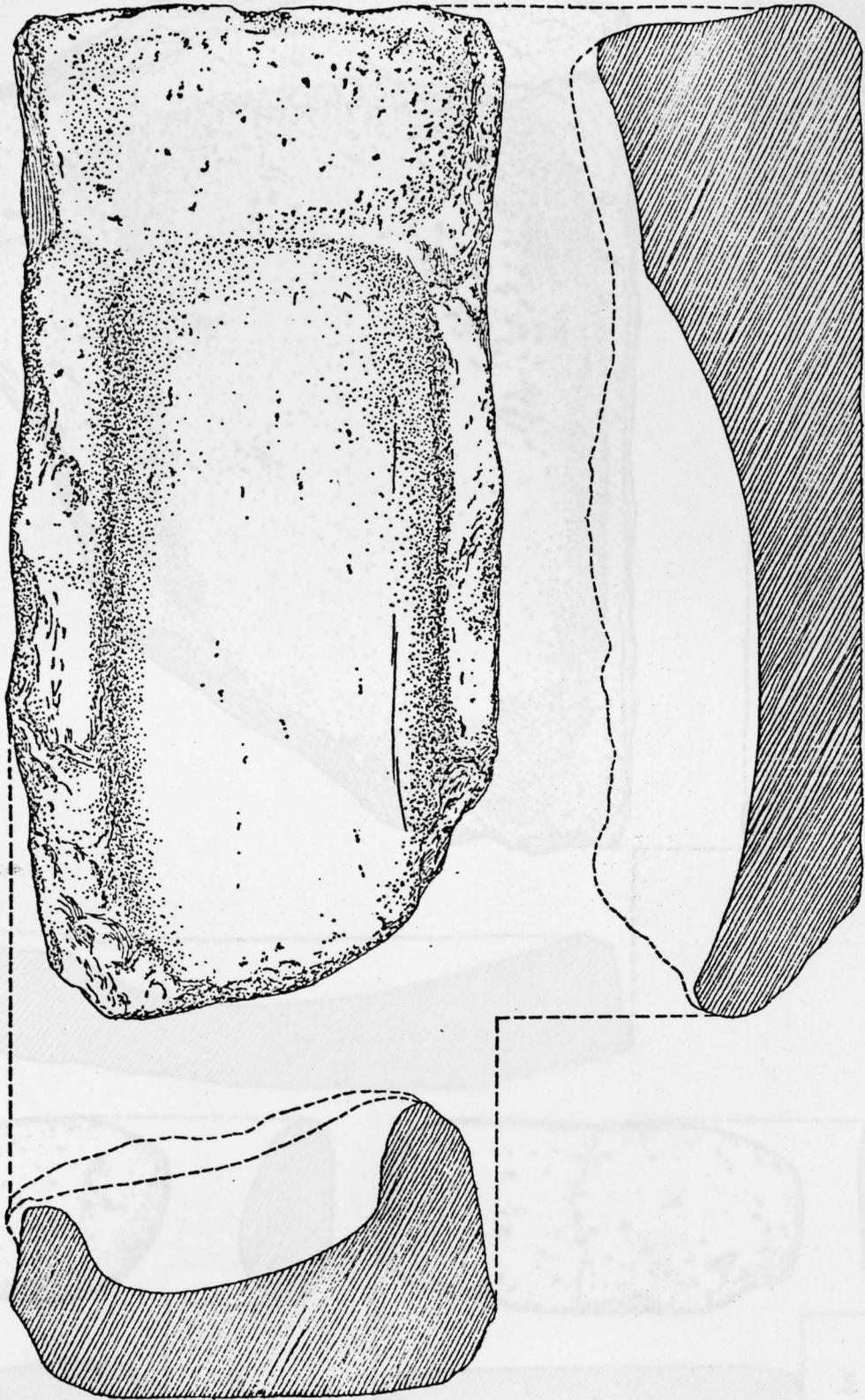


Fig. 16. Utah-type metate.

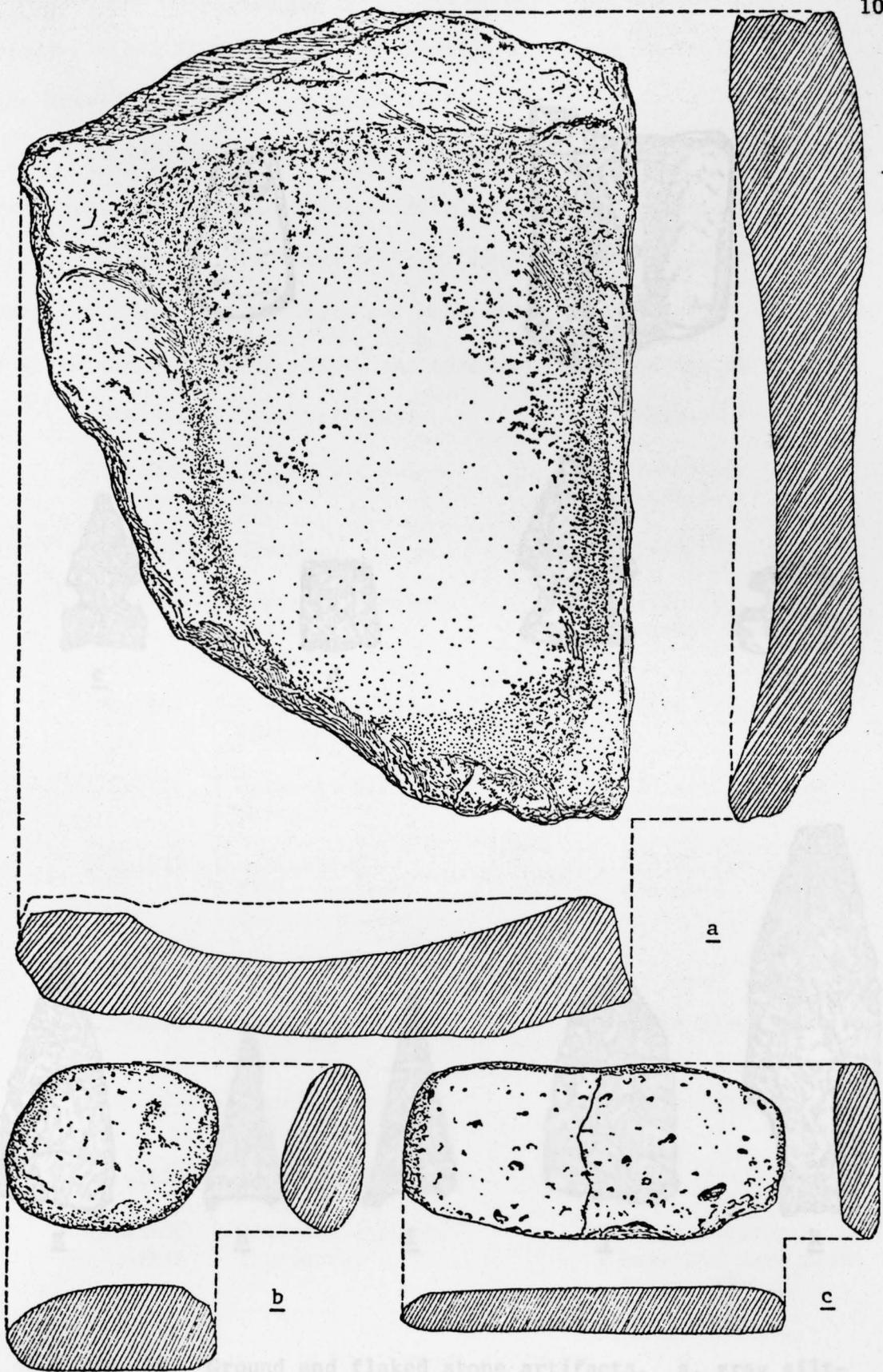


Fig. 17. Ground stone artifacts. a, shallow-trough metate; b, one-handed mano; c, two-handed mano.

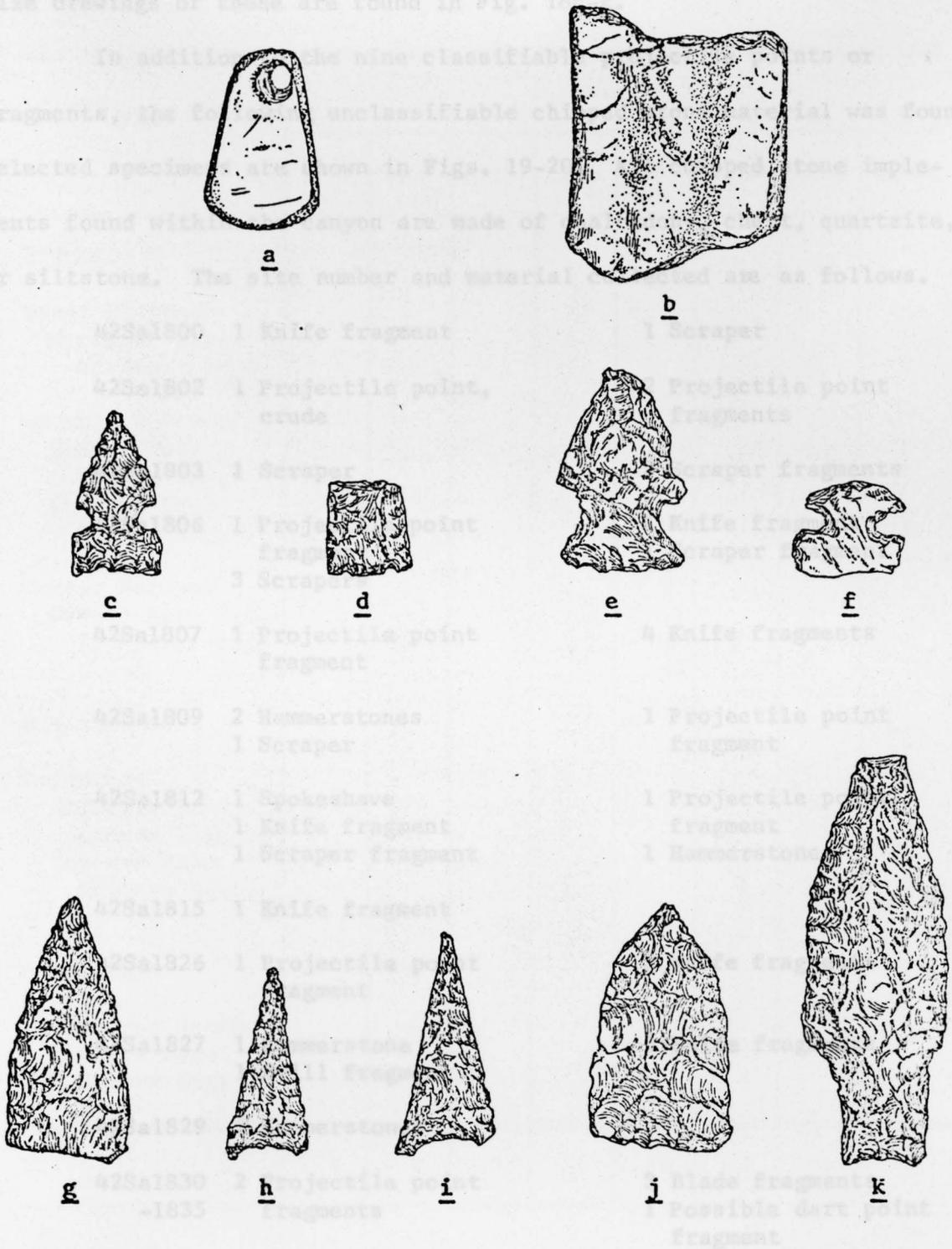


Fig. 18. Ground and flaked stone artifacts. a, gray silt-stone pendant; b, arrow shaft smoother fragment; c-f, stemmed projectile points; g-j, non-stemmed projectile points; k, shouldered projectile point.

survey. Classification and distribution are shown in Table 4. Full-size drawings of these are found in Fig. 18c-k.

In addition to the nine classifiable projectile points or fragments, the following unclassifiable chipped stone material was found. Selected specimens are shown in Figs. 19-20. All chipped stone implements found within the canyon are made of chalcedony, chert, quartzite, or siltstone. The site number and material collected are as follows.

42Sa1800	1 Knife fragment	1 Scraper
42Sa1802	1 Projectile point, crude	2 Projectile point fragments
42Sa1803	1 Scraper	2 Scraper fragments
42Sa1806	1 Projectile point fragment 3 Scrapers	1 Knife fragment 1 Scraper fragment
42Sa1807	1 Projectile point fragment	4 Knife fragments
42Sa1809	2 Hammerstones 1 Scraper	1 Projectile point fragment
42Sa1812	1 Spokeshave 1 Knife fragment 1 Scraper fragment	1 Projectile point fragment 1 Hammerstone
42Sa1815	1 Knife fragment	
42Sa1826	1 Projectile point fragment	3 Knife fragments
42Sa1827	1 Hammerstone 1 Drill fragment	3 Knife fragments
42Sa1829	2 Hammerstones	
42Sa1830 -1835	2 Projectile point fragments	3 Blade fragments 1 Possible dart point fragment

MISCELLANEOUS ARTIFACTS

Four broken ceramic spindle whorls were collected (Fig. 21b-e).

Table 4. Classification of projectile points.

Form	Site							Total
	1802	1807	1815	1816	1822	1827	1834	
STEMMED								
Basal Notched Straight Base Straight Edge		1						1
Lateral Notched Convex Base Convex Edge	1							1
Concave Base Convex Edge				1				1
Corner Notched Convex Base Irregular edge						1		1
NON-STEMMED								
Notchless Straight Base Convex Edge							1	1
Concave Base Concave Edge			1			1		2
SHOULDERED								
Shouldered Notch Concave Base Convex Edge						1		1
TOTAL	1	1	1	1	1	3	1	9

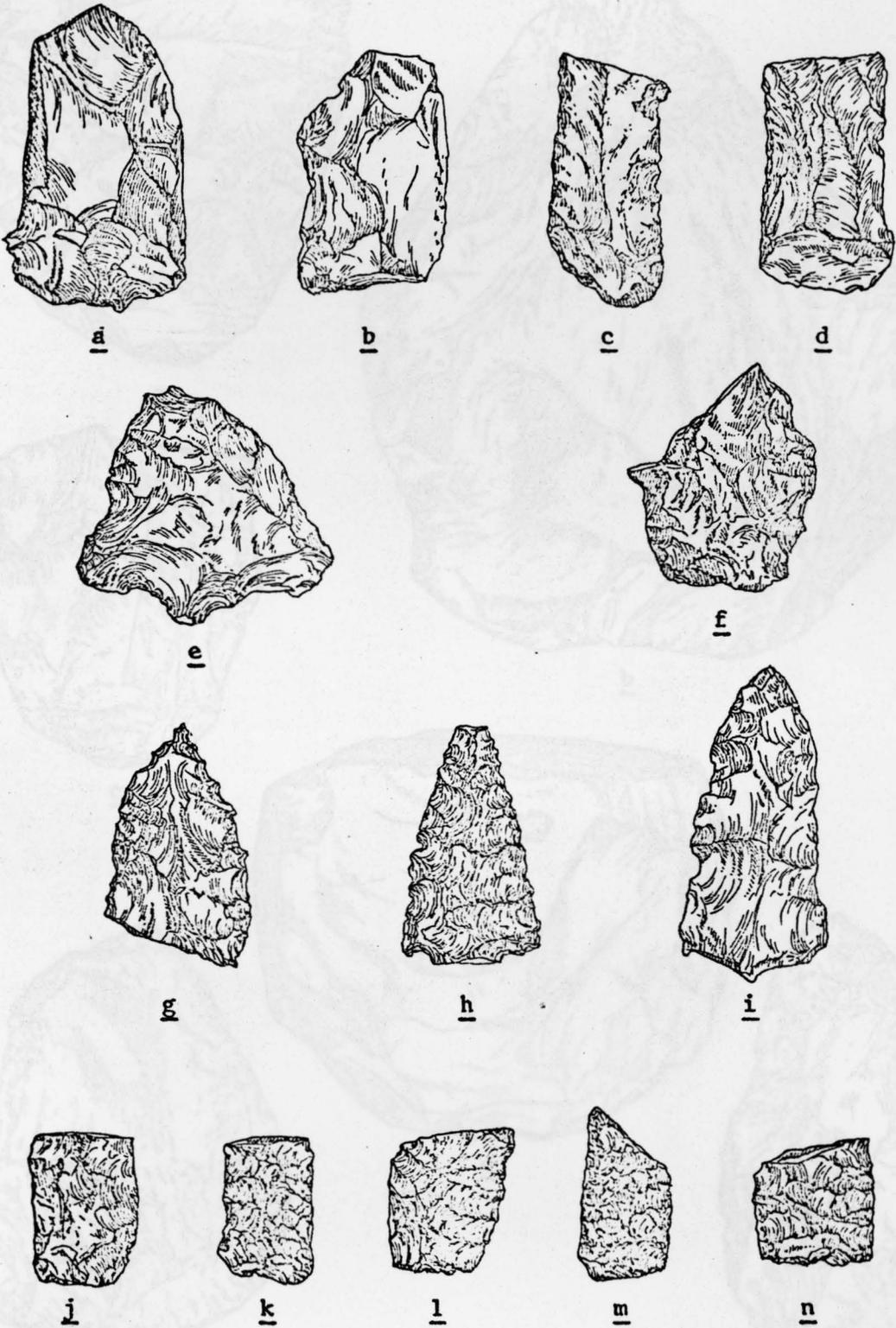


Fig. 19. Chipped stone implements. See Chapter 4 for artifact identification.

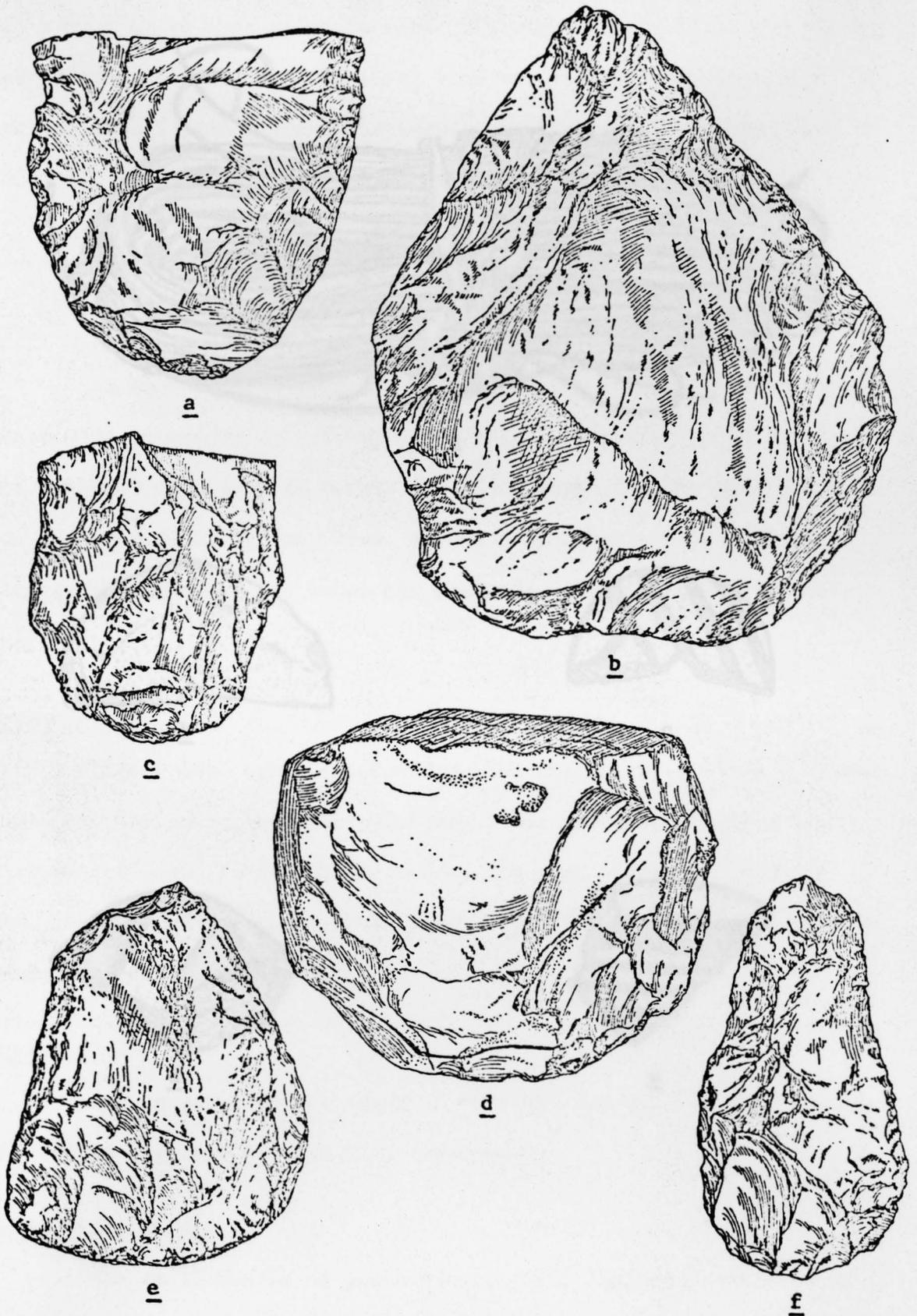


Fig. 20. Chipped stone implements. a, c, e, scrapers; b, d, hand choppers; f, knife.

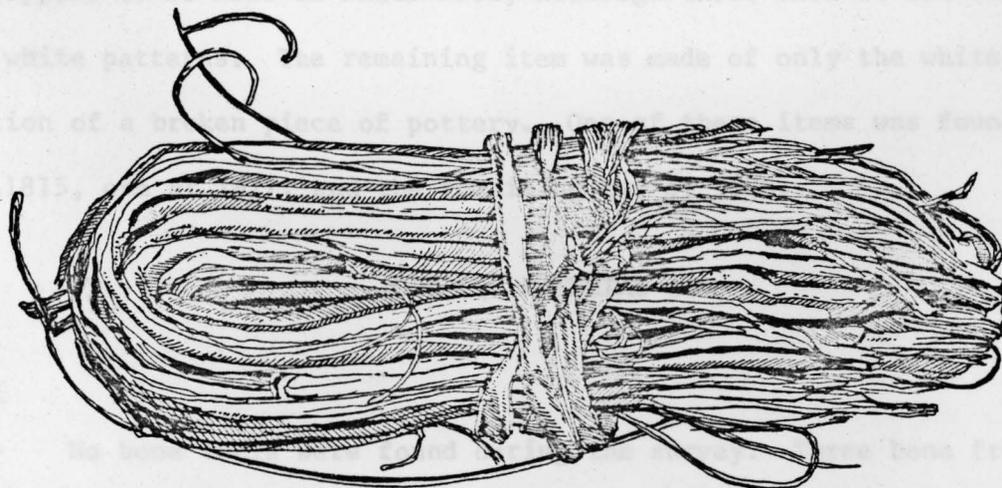
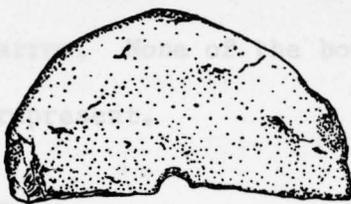
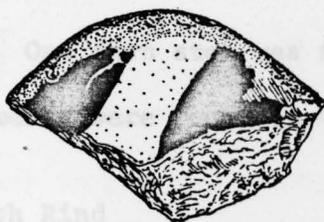
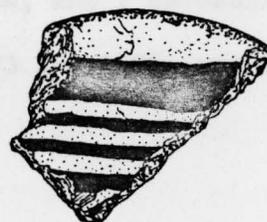
abcde

Fig. 21. Vegetable remains and miscellaneous artifacts. a, yucca fiber bundle; b-e, broken ceramic spindle whorls.

All appear to be made of white ware, although three exhibit the black and white patterns. The remaining item was made of only the white portion of a broken piece of pottery. One of these items was found at 42Sa1815, one at 1817, and the remaining two at 1806.

ORGANIC MATERIAL

Bone

No bone tools were found during the survey. Three bone fragments were picked up at 42Sa1812 and fifteen fragments at 42Sa1816. One fragment was found at 42Sa1829. These fragments include splinters and joint portions of long bones that may have been split to obtain the marrow. None of the bones has been identified as to the animals they represent.

Corn Cobs

Thirty corn cobs were found during the survey. Sites 42Sa1801, 1804, and 1829 were the sites yielding these remains. These 30 cobs include 1 14-row, 13 12-row, 9 10-row, 6 8-row, and 1 unidentified cob. One corn stem was found at each 42Sa1823 and 1829, and corn husk fragments were found at 42Sa1801.

Squash Rind

One squash rind was found at 42Sa1829 and has not been identified as to the type of squash it represents.

Yucca Fiber Bundle

One small bundle of yucca fibers (Fib. 21a) was collected at site 42Sa1801 in a small niche in Unit H. This bundle appears to have been wound around something small, such as the palm of the hand, and

then slipped off and tied, possibly to be used at a later time as cordage.

Miscellaneous

One very short fragment of twisted juniper bark cordage was found at 42Sa1829, and one yucca spine was found at 42Sa1804. This may have been carried to this site by rodents and may not have been used by the prehistoric inhabitants. Two reed fragments and one black birch fragment were also found at 42Sa1801. A small amount of suspected cotton fiber was found at 42Sa1829.

ART

Sites in North Cottonwood Canyon exhibiting rock art are 42Sa-1801, 1805, 1811, 1820, 1822, and 1829. A small, circular petroglyph (Fig. 22a) was found just below 42Sa1813. With the exception of this site and 42Sa1805, which is an isolated pictograph (Fig. 22b) with no cultural materials associated with it, all sites exhibiting art fall within the PII-PIII time period. 42Sa1822 also exhibits a small number of BMIII-PI artifacts. However, architecture associated with the two pictographs found at this site is not typical of BMIII-PI, but appears to have been constructed by the later PII-PIII peoples. Thus, the rock art in North Cottonwood Canyon appears to have been executed during the PII-PIII time period. In all probability, 42Sa1805 and 1813 would date to the same time period, but, because no diagnostic materials were found in association with the sites, it will be difficult to determine a date.

Both pictographs and petroglyphs, in a variety of motifs, were recorded in the canyon in association with both granaries and habita-

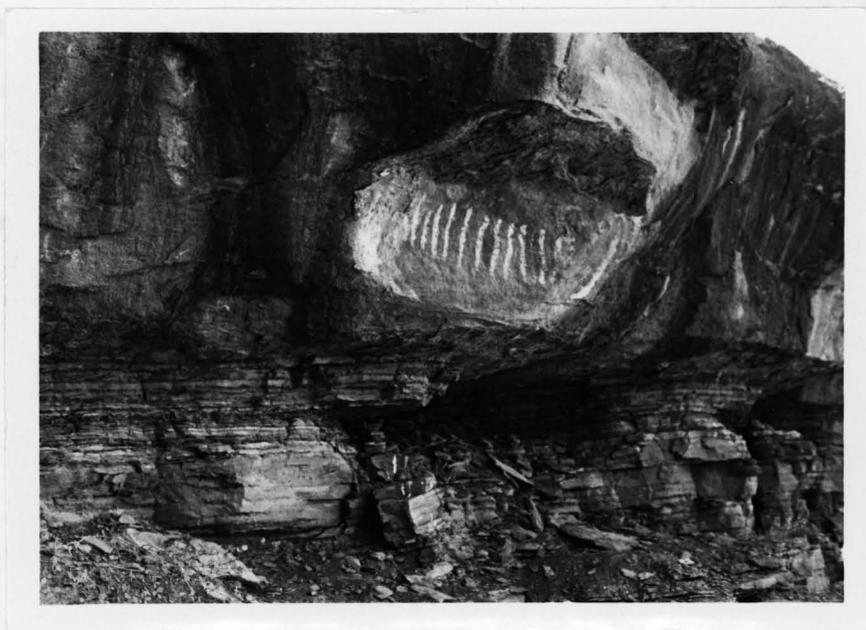
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Fig. 22. Petroglyph and pictograph. a, 42Sa1813; b, 42Sa1805.

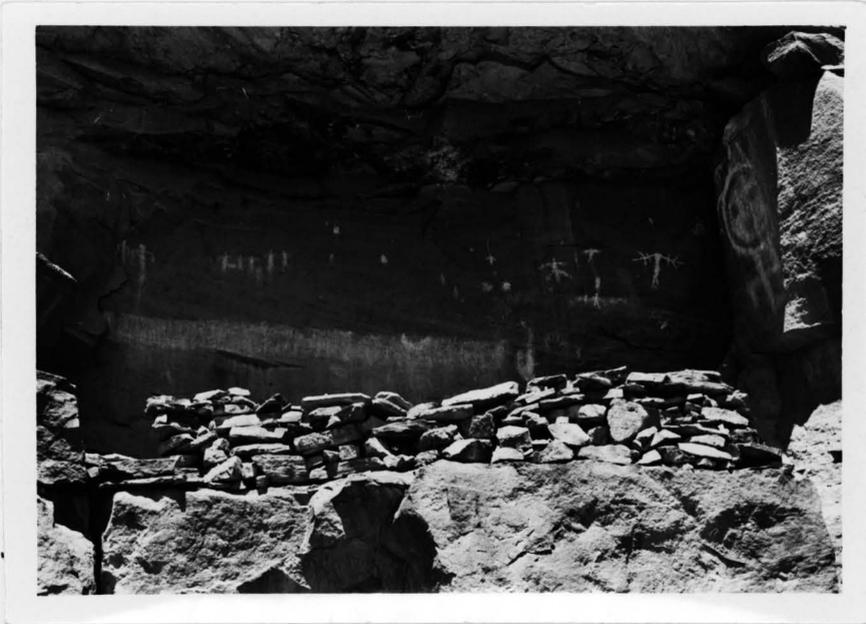
tion structures. In a few isolated cases, a pictograph or petroglyph was found that was not associated with any structures or campsites.

Pictograph figures were painted in both red and white pigments. They include negative (Fig. 23a) and positive hand prints, which are a common phenomenon in Anasazi sites (Schaafsma 1971:62), as well as anthropomorphic figures, snakes?, and a variety of geometric designs (Figs. 22-25). One "shield figure" similar to Fremont motifs recorded by Wormington (1955:167-170) was found at 42Sa1801. Although the figure resembles those found in the Fremont area, similar motifs have been found in northeastern Arizona (Gunnerson 1969:159).

Ambler (1970:3-4) suggests that the presence of Fremont rock art south and east of the Colorado River where there is little evidence of Fremont occupation is an indication that this region was used as a hunting ground by Fremont people, either predating the Mesa Verde occupation there or contemporary with it. This is in contradistinction to Sharrock's belief that the Fremont motifs were borrowed wholesale by the Late Pueblo II and Early Pueblo III Mesa Verde occupants without a migration of Fremont people, since all habitation sites yield purely Mesa Verde material (Schaafsma 1971:51).



a



b

Fig. 23. Pictographs. a, negative hand prints--42Sa1824; b, anthropomorphic figures--42Sa1801.



a



b

Fig. 24. Pictographs. a, 42Sal822; b, 42Sal822.

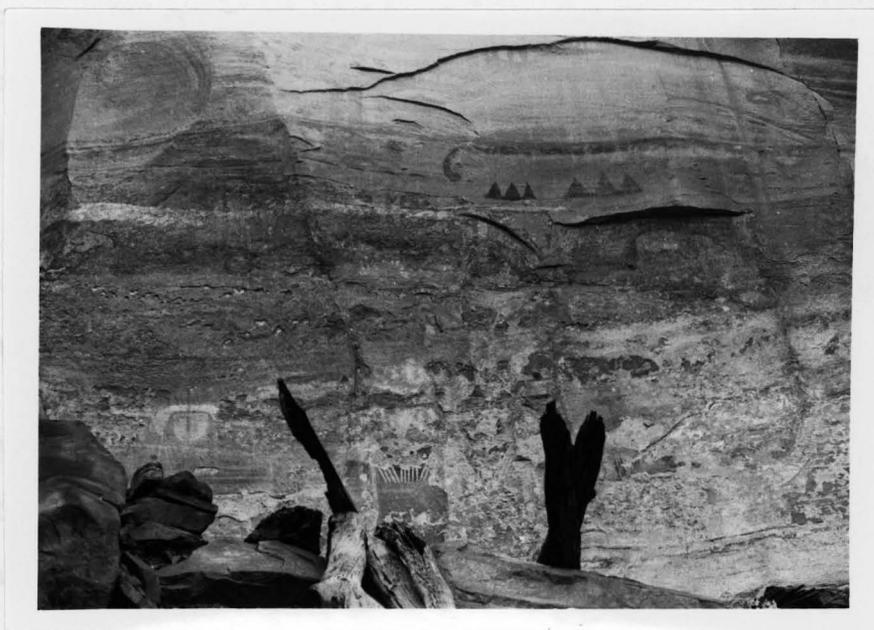
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Fig. 25. Pictographs. a, 42Sa1801; b, 42Sa1829.

Chapter 6

DISTRIBUTIONAL ANALYSIS OF SITES

SITE TYPES

The types of sites found within the canyon are as follows.

Granaries or Storage Structures

These were constructed in small alcoves or by walling up small overhangs between ledges in the cliffs. No evidence of occupation was found associated with this type of structure to indicate that their use was for anything but storage.

Open Campsites or Chipping Areas

These sites were found both on the mesa top immediately above North Cottonwood Canyon and within the canyon proper. This type of site contains both ceramic remains and chips and flakes of stone and some hearths or burned areas. Those sites of this type found on the mesa top above the canyon contained no pottery. All sites of this type appear to have been used for short periods of time, possibly as tool manufacture areas or hunting camps.

Open Masonry Sites

These sites were usually located on natural knolls or benches within the canyon (Fig. 26). Masonry appears to have been wet course-laid. In some instances, mud plaster was applied to the walls.

Petrographs



Fig. 26. Open masonry site.



Fig. 27. Cave site.

This type of site is composed of either one or a series of pictographs or petroglyphs. In all but two instances, they were found in association with storage or habitation structures.

Cliff Masonry Sites

These sites are located in natural overhangs at the base of a cliff and top of a talus slope. Masonry was wet course-laid with evidence of dry-laid walls having been used as possible retaining walls. These sites include both storage and habitation-storage units.

Stone Rings

These sites are all open sites and are located on natural rises or river terraces within the canyon. They are only one course high and are probably the remains of a brush shelter or windbreak.

Open Slab-lined Storage Structures

Only one of these sites was recorded in the canyon, and it appears from surface indications to be a possible BMIII-PI slab-lined storage cist.

Cave Sites

Two caves were recorded in the canyon, although one was very shallow and exhibited very little in the way of cultural material. The other cave, however, showed evidence of having been used over a long period of time (Fig. 27). The roof was blackened and there appeared to be an ample deposit of fill on the floor. Three probable room outlines were found in association with this cave and probably date to the later PII-PIII time period. This is a natural cave and there is no evidence of any alteration.

ANALYSIS

The earliest sites in North Cottonwood Canyon date to the BMIII-PI time period. Nine sites within the canyon date to this time period, and all are found in the Moenkopi formation, the bottom most formation in the canyon. The early sites are located in the canyon or valley floor with no apparent concern for defense being noted (Matheny 1971:156). Two of the sites are located on natural rises or river terraces and consist of stone rings. One other stone ring may also date to this period, but no diagnostic material was found at the site. Four open masonry sites, one open slab-lined storage structure, one open campsite, and one cave site also show evidence of having been used by BMIII-PI peoples. All of these sites, however, were used from this early time period through PIII, according to ceramics analyzed from these sites, the exception being 42Sa1800.

Only one site in the canyon could be designated as an early site dating only to BMIII-PI. This site (42Sa1800) was evidenced by sandstone slabs on edge (possible slab-lined storage units), and only a small amount of stone debitage. The one sherd (PII-PIII) found at the site could have been carried from 42Sa1801, which is nearby. All other sites dating to this time period had been utilized by later peoples, making identification as a BMIII-PI site all but impossible unless excavation was undertaken.

Four sites exhibit ceramic materials dating to the PI-PII time period. They, too, are situated in the Moenkopi formation. One (42Sa1827) is a site with BMIII-PI material also in evidence. Another (42Sa1809), an open campsite, also exhibits earlier materials. Site

42Sal815 is a one-course stone outline located on a large boulder and dates from Early PII to PIII. Site 42Sal806 is an open masonry site located on a natural rise of ground on the valley floor. This site also exhibits BMIII-PI material and was used at least periodically until PIII times.

Only those sites dating to the later PII-PIII time periods utilize the overhangs and cliff faces found in the Moss Back member, and in one instance (42Sal829), a cliff overhang in the Wingate formation. Every site recorded in the canyon that contains diagnostic materials, with the exception of 42Sal800, was occupied during the PII-Early PIII time period, and in some instances from Early PIII to Late PIII.

Sites in the lower portion of the canyon are scarce in North Cottonwood Canyon, possibly due to the lack of areas for building and availability of water source. The Moss Back member dips until it is no longer present in the north end of the canyon. There are, then, no cliffs for construction of the cliff granaries preferred during the PII-PIII time period. Site 42Sal829 was found at the base of the Wingate formation, but the hike up to sites such as this would have been tiring and may not have been preferred. This site does have a possible water source nearby in the contact zone between the Wingate and Chinle formations, and the site location appears to have been defensive. If water had to be carried from North Cottonwood Creek, or if crops had to be tended in the valley, it was a long, tiring hike. Judging from the small number of artifacts found, however, this site appears to have been used for a short period of time.

Both habitation structures found in the cliffs (42Sal820 and

1829) appear to have been used for a fairly short period of time and may represent a last stronghold of the people just prior to abandonment.

In summary, the evidence seems to indicate the canyon was occupied from BMIII-PI times until Late PIII. However, only nine sites of the 20 recorded in the canyon proper that displayed diagnostic artifacts date to the earlier time period. This would indicate a somewhat limited use of the canyon during this time. It must be remembered, however, that the population during this period of time was less than during the Late PII-PIII time periods. It is also possible that a number of earlier sites could have been lost through burial in alluvium or by erosion.

The largest number of sites are found between an elevation of 6200 ft for sites 42Sal816 and 1827 and 5880 ft for sites 42Sal800, 1817, and 1818. Open campsites or chipping areas on the mesa above the canyon (42Sal830 through 1835) are found at an elevation of between 6250 ft and 7360 ft. Site 42Sal829, which is four miles downstream from the main body of sites, is at an elevation of about 5840 ft, and, although it is in a higher formation, it is at a lower elevation than 42Sal800 because of the dip in the formations in the canyon. Between 42Sal827 near the head of the canyon and 42Sal801 at the lower end, there is a drop of 320 ft in approximately four miles.

It appears that ample cultivatable land was available to the people who inhabited this area, and, together with the water from North Cottonwood Creek, it could have produced an ample food supply. A simple flood irrigation system could have been used. Canyon bottoms contain deep deposits of rich alluvium that have been washed down from

the higher elevations. These soils would have made the canyon bottoms ideal for the practice of horticulture.

Vegetation and ground cover in the canyon at lower elevations between 5800 ft and 6200 ft include juniper, pinon, sagebrush, cactus, and various grasses. Cottonwood, agave, sunflower, and willows are also found. Box Elder, serviceberry, bee plant, and sunflower are also included in plants found at lower elevations (Matheny 1971:153). In the higher elevations near the head of the canyon, yellow pine is also found and may have been used along with juniper, pinon, and cottonwood for building material.

Wildlife encountered in the canyon included gray fox, coyote, various squirrels and other rodents, black-tailed jackrabbit, cottontail rabbit, mule deer, chukkar partridge (a recent import from Asia), and various other birds including the bald and golden eagle and various snakes. The chukkar partridge is the only one of this list that would not have been present prehistorically. The addition of the desert bighorn sheep to this list shows much the same wildlife in the canyon as in many of the other drainages within the Anasazi cultural area.

In Canyonlands, Sherrock (1966:61) reports that "no sites which are distinctively affiliated with the Fremont culture were recorded; no Fremont pottery or other portable artifacts; and no Fremont architectural styles or techniques were noted." Fremont-style art motifs were found.

Another possibility is that both the designs of rock art as well as the Utah-type petates could have been borrowed wholesale from the Fremont peoples (Sherrock 1966:62).

Chapter 7

CONCLUSION

CULTURE CONTACT

The original problem to be solved with a survey and subsequent analysis of the material culture from North Cottonwood Canyon was to determine if culture contact between the Anasazi and Fremont cultures took place in the North Cottonwood area, and if so, to what extent. During the survey and subsequent analysis of material culture, very little evidence of contact between these two cultures was found. Only in art and in a few instances where Utah-type metates were found or reported do we find any influence of the Fremont people making itself present. Ambler (1970:4) suggests that these were the results of periodic hunting forays by the Fremont people into areas not occupied permanently. This may not be true in North Cottonwood Canyon, as the Fremont-style art is found in consistent association with Mesa Verde-type architecture and ceramics. In Canyonlands, Sharrock (1966:61) reports that "no sites which are distinctively affiliated with the Fremont culture were recorded; no Fremont pottery or other portable artifacts; and no Fremont architectural styles or techniques were noted." Fremont-style art motifs were found.

Another possibility is that both the designs of rock art as well as the Utah-type metates could have been borrowed wholesale from the Fremont peoples (Sharrock 1966:62).

Another theory presented is that both the presence of Fremont rock art and grinding implements could possibly have been the result of intermarriage or other interaction between peoples from the two cultural areas. It is possible that a few Fremont peoples attached themselves to various Anasazi villages, thereby introducing some of their ideas. There is no evidence, however, that this occurred on a large scale (Gunnerson 1969:182).

The possibility exists that North Cottonwood Canyon was not inhabited continuously by the Anasazi, perhaps a "result of the 'human cycle,' whereby an area is rendered unfit for residence after a certain period of human occupancy" (McGregor 1965:469), and that a small group or groups of Fremont people could have attempted to use the area in the absence of the Anasazi. This theory has not been tested.

The culture contact between the two groups probably was slight and could have been the result of a very small number of people because of the small number of diagnostic Fremont characteristics observed. The fact that ample contact was not evidenced and shown through analysis of the material does not make the project a failure. On the contrary, one possible area where a culture contact zone between the two cultures might have been present has simply been eliminated and probably needs little further research done on this problem. I would suggest that anyone else working on this problem center their work further north nearer the Fremont cultural area between North Cottonwood Canyon and Moab.

OCCUPATION

From the evidence presented in this report, it can be stated

that North Cottonwood Canyon was inhabited from BMIII-PI times through the PIII time period, although in places it may not have been a continual occupation.

Thirty-six archaeological sites were located, surface collections made, photographs taken, and the cultural material analyzed. The conclusions drawn from this study conducted in North Cottonwood Canyon may do little to change radically the thought of archaeologists concerning time periods when the Anasazi cultural area was inhabited, and by whom. It should, however, be of value in augmenting already existing knowledge of the region.

Eight types of sites were recorded in the canyon. They include granaries or storage structures, open campsites or chipping areas, open masonry sites, petroglyphs, cliff masonry sites, stone rings, open slab-lined storage structures, and cave sites.

In reiterating some of what was discussed in the preceding chapters concerning ceramics, it was found that the pottery recovered is overwhelmingly of the Mesa Verde tradition and demonstrates a time span from BMIII-PI to Late PIII, with sherds from the PII-PIII time period accounting for 94% of the total sherd count. The probable time span for occupation of the canyon is from c. early A.D. 800's to 1250, with the major occupation occurring between A.D. 1050 to 1200.

Ceramics from the Abajo, Chapin, Mancos, Dalton, Mustang, Devil Mesa, and the Mesa Verde Ceramic Groups were collected and analyzed. Sherds from the Mesa Verde Ceramic Group, including Mesa Verde Black-on-white: Varieties 1 and 2, accounted for 54.5% of the total recovered, while those from the Mancos Ceramic Group accounted for 35.6%, helping to confirm the Late PII-PIII date as the major

occupation of the canyon.

Nine sites within the canyon date to the BMIII-PI time period and, with the exception of one cave site, are all open sites situated either on natural knolls or benches within the canyon or on river terraces.

Four sites dated to the PI-PII time period are also found as open sites on natural rises, knolls, or river terraces just above the valley floor.

ABANDONMENT

Beginning with the Late PII-Early PIII time period, the cliffs and overhangs in the Moss Back member were utilized for storage as well as for habitation structures, something not uncommon in the Anasazi cultural area. This time period also saw the emergence in the area of sites that may have been defensive in nature. Such sites in North Cottonwood Canyon are 42Sal801, 1820, and 1829. If this is a defensive manifestation, the reason for it is not understood. Some archaeologists have claimed that there were marauding raiders from other tribes (Kidder 1962:336). This may be, but why did this problem develop so suddenly? What caused the problem? Can a group of raiders from a necessarily small band of nomadic people continually stage a successful seige on a large group or groups of sedentary people who had successfully inhabited the area for centuries and who undoubtedly enjoyed an advantage in numbers? I think not. A possible reason or reasons follows.

At best, the Four Corners area today is marginal for continual occupation over a long period of time. Even today with our technology,

fertilizers and irrigation systems, we are many times at the mercy of nature. It may have been no different in prehistoric times. We can, however, as human beings come together and solve a problem, even one as serious as continued drought. It is only when more than one problem presents itself that we are sometimes unable to cope with the situation. As stated, one problem, such as drought, can be overcome by working together and conserving the water which is so precious for successful habitation in the Anasazi area. Suppose that this problem was added to by the presence of arroyo cutting, and dropping of the water table, making irrigation difficult and, in some instances, impossible. Couple these two misfortunes with a possible cooling of the climate affecting the growing seasons (Lipe 1970:136-37), and maybe add the possibility of a change in the rainfall pattern, and a potential situation for internal discord presents itself. In the Four Corners area today, there are fights and legal actions over water rights. This may have also been true during prehistoric times. The coming together of the people into larger communities might have been necessary to provide for the fullest exploitation of remaining soil and water resources (Lipe 1970:136-37).

When the question is asked concerning why the apparent defensive-like structures arose during the PIII time period, it may be that, due to the possible water problems discussed, the Anasazi became their own worst enemy.

LIFEWAY

The peoples who inhabited North Cottonwood Canyon were a group of Mesa Verde-affiliated Anasazi whose lifeway probably differed little

from that of their neighbors and families throughout the Four Corners region. Because they lived in such close contact with the land and nature in general, they utilized many natural resources, both as food and in the manufacture of tools and other utilitarian objects. Domestic crops were planted and harvested, and a few domestic animals were utilized for meat and, in the instance of turkeys, for feathers used in the manufacture of robes. A great many wild animals and plants were also used by the people, not only for food but also for the manufacture of domestic items.

They raised corn, squash, and probably beans and gourds, and possibly imported cotton from peoples in warmer climates with longer growing seasons to be used in the weaving of robes and sashes. The fruit of the gourd, when dried and hollowed out, was used as vessels to store or carry foodstuffs or other materials (Jennings 1966:69) Bee plant (*Cleome serrulata*) may have also been cultivated, although the evidence is scanty (Osborne 1964:173). When young, the plant makes an edible, but not always palatable, herb, and when mature, can be boiled to produce a black dye that may have been used in coloring basketry, cloth, and possibly pottery, although this is open for experimentation.

Other vegetable foods that were utilized by the people but were not cultivated included roots of various types, bulbs, grass seeds, sunflower seeds, pinon nuts, acorns, berries, chokecherries, and yucca and cactus (Wormington 1964:37-38).

They utilized the natural knolls and rises in the canyon floor for habitation sites and, in doing so, were in close proximity to the water from North Cottonwood Creek and cultivatable land. The crops were probably cultivated wherever possible through some means of

irrigation, although no evidence for water storage or irrigation was found in the canyon. Either what evidences were present in the form of terraces, check dams or ditches have been eroded away or covered by alluvium, or they were not present in the beginning. During the period of occupation, the soil must have been rich due to topsoil being carried down to the valley by flooding from higher elevations (Matheny 1971:153). With a simple flood irrigation system, it would have been a relatively easy chore to raise domesticated foodstuffs. Today this would not be possible, due to the extensive arroyo cutting that has taken place.

The habitat in the regions of higher elevation, such as North Cottonwood Canyon, may have been better for habitation because of the close proximity to building materials, such as Ponderosa pine, and foodstuffs, such as pinon nuts and various berries found only at the higher elevations. These include serviceberry, chokecherry, and elderberry. Wild strawberry and raspberry are also found in some localities. Also, the temperature is more pleasant, at least in the summer. Many times at a higher elevation, more water is available due to the runoff from the mountains. It is probable that year round sites of habitation will not be found at elevations over 7500 ft, as the growing season may be too short for the dependable production of domesticated foodstuffs. The canyon is close to good hunting areas where Mule deer can be hunted at the present time, and during prehistoric times, elk and desert bighorn sheep may have also been available.

Not only were animal and vegetable matter used by these people, but a great deal of stone and clay was also utilized to manufacture many items that were so important to them in their everyday lives.

COMPARISON OF SETTLEMENT PATTERNS

It is difficult to compare the settlement pattern in North Cottonwood Canyon with settlement patterns in other surrounding areas. One problem encountered in this type of study is that most previous reports make little or no mention of settlement patterns, making it difficult to extract information from them. Another problem is the diversity of the canyons themselves.

North Cottonwood Canyon is one in which ample arable land is present for the growing of domestic foodstuffs, where there are natural mounds or knolls situated on or near the canyon floor, and where there are overhangs and cliffs to be utilized in the construction of storage granaries and, in some instances, habitation structures. Of prime importance is the stream that runs the full length of the canyon which would have provided the much-needed water.

Of the areas to be discussed and compared, Montezuma Canyon comes as close to matching the physical characteristics as any. Even some areas within Glen Canyon do not compare because of the lower elevation, different geological formations, and the resulting differences in the biota.

Beef Basin is just that--a basin; Alkali Ridge is a ridge; Cedar Mesa is a mesa, and, due to lack of sufficient published material, we know very little about Indian Creek. This is unfortunate, because, with its close proximity to North Cottonwood Canyon, it would be possible to tell a more complete story about the North Cottonwood peoples if we knew more about similar peripheral areas.

Glen Canyon

Glen Canyon exhibited the full range of Anasazi chronology as we now know it. It exhibits spotty distribution of the earlier time periods of occupation or use (BM through PI), but the evidence becomes greater with the increased number of sites found dating to the PII-PIII times. Jennings (1966) did not discuss site distribution. Ceramics in the northern portion of the canyon exhibit high percentages of Mesa Verde Anasazi traits. In the lower portions of the canyon, a larger number of Kayenta traits were noted. North Cottonwood Canyon, therefore, has closer similarities to the northern reaches of the canyon.

Alkali Ridge

At Alkali Ridge, Brew (1946) found an occupation from BMIII through the PIII time period, the PII time period being the most common. This might be partially due to the fact that Brew was working toward filling the gap in Anasazi chronology created by the lack of diagnostic PII sites.

Settlement pattern at Alkali Ridge cannot be compared with that of North Cottonwood Canyon, even though they were occupied contemporaneously. They differ from one another to such an extent physiographically that any comparisons would have to be made with material culture instead of settlement patterns. It is even difficult to compare architecture, because what is exposed in North Cottonwood is located in cliff overhangs, and there are no structures of this type on Alkali Ridge. The sites in the canyon that are located on or near the valley floor in the open have not been excavated, so architectural styles cannot be determined accurately. Site 42Sa1812 does, however, exhibit depressions with building rubble located on the south and could be

"Prudden Unit" structures. This "Unit Type" structure is reported by Prudden (1918) during his work in the San Juan watershed, and by Brew (1946) during excavations at Alkali Ridge.

Ceramics recovered at Alkali Ridge are much the same as those recovered at North Cottonwood, with the exception of some of the earlier types dating to the BMIII-PI time period found only at Alkali Ridge.

Beef Basin

All of the sites recorded in Beef Basin (Rudy 1955) are open masonry sites, although PII-PIII is the predominant time period involved. Ceramics found at North Cottonwood Canyon are very similar to those found in Beef Basin and, with few exceptions, fall within the same time range.

Hammond Canyon

Gunnerson (1960) notes that the minimum time span of occupation in the Hammond Canyon area was from A.D. 900 to 1200. Sites were small and may have only been used seasonally by farmers raising crops on mesa tops above, as there is little arable land in the canyon. Architecture is comparable to that found at other PII-PIII Anasazi sites (Gunnerson 1960:17).

Pottery is scarce at Hammond Canyon, but that present shows affiliation with the Mesa Verde branch of the Anasazi, although Mancos Black-on-white and Mesa Verde Black-on-white do not appear to be as clear cut as the type samples. This situation is also found in Beef Basin, where Rudy reported that Mancos Black-on-white and Mesa Verde Black-on-white did not fit the classic types found in other Mesa Verde

area sites. Gunnerson also finds Chapin Gray at sites bearing PII-PIII architecture and suggests that the earlier type of pottery manufacture could have continued into the later time periods in this area. Excavations at those sites might show a habitation by the earlier peoples instead of the situation proposed by Gunnerson.

Canyonlands National Park

Sharrock (1966) reported in a brief paper the results of a survey of Canyonlands National Park, including Salt Creek and the Needles area. Cultural affiliation was Mesa Verde Anasazi and Fremont, although the Fremont culture is evidenced only by rock art. The same situation is found in North Cottonwood Canyon. Petrograph sites, including both pictographs and petroglyphs, were recorded and exhibited much the same style elements as were found in North Cottonwood, including Fremont shield figures.

A list of site types was given, as was a list of the site numbers. There was not, however, a correlation to make it possible to establish a distribution pattern of the various types of sites during various time periods.

Chipping sites in Canyonlands are open sites. Transient camps are, for the most part, in the alcoves, although some are found in the open. Most storage sites are found in the cliffs, as they are in North Cottonwood. Alcove habitation sites are also reported and, in some cases, were large, with as many as 34 structures. Rock shelters were also reported and contained artifacts diagnostic of the PII-PIII time period, but with no structures (Sharrock 1966:64-67).

The major period of habitation in Canyonlands National Park was

during the Late PII-Early PIII periods, roughly A.D. 1075-1150, and it is doubtful that occupation began before that time.

The ceramics from Canyonlands includes only that pottery dating to these later time periods. Also included are a small number of Fremont Ware and Tsegi Orange Ware sherds (Sharrock 1966:77-78).

Montezuma Canyon

Montezuma Canyon exhibits much the same pattern during the early periods (BM-Early PII), although during the later periods, there were very few structures constructed in the cliffs; however, a number of granaries are located in these areas (Matheny 1962). Probably due to the physiography of the canyon, there are not found a greater number of structures, especially habitation structures, in the cliffs. de Haan (1972:138) reports only six sites dating to the PII-PIII time period being located at a talus slope top.

Pottery types found in North Cottonwood Canyon fit quite well the descriptions presented by Forsyth (1972) in his study of Montezuma Canyon ceramics.

Cedar Mesa

The ceramics recovered at Cedar Mesa are the same as are found at North Cottonwood Canyon. There is evidence at Cedar Mesa of PI peoples utilizing overhangs in the cliff for storage structures (Green 1970), although most of the PI-PII habitation sites are found on the mesa tops.

A similar situation exists in North Cottonwood, but because of physical differences in the areas, the earlier sites are located near the valley floor close to the agricultural land, while at Cedar Mesa

they are located on the mesa top for probably the same reason. In both areas, the later PII-PIII sites are found in the cliff overhangs, although mesa top or valley floor sites of these later periods are found in the respective areas. It should also be noted that the seasonal camp sites or chipping sites at North Cottonwood are found on the mesa top and are associated with no other site type. These sites at Cedar Mesa are found on the mesa, often near habitation and storage sites. The same site distribution is not found at the two areas, although there are a number of close similarities.

It appears, then, that of the areas discussed, all were inhabited during the same BM-PIII time periods, although not always continually, with the exception of Canyonlands and Beef Basin. These two areas date to the PII-Early PIII time period.

COMMENTS AND RECOMMENDATIONS

As stated by Fowler (1959:36),

A survey activity is, of course, the first step toward gaining an understanding of the archaeology of an area. It serves two purposes. One is simply to locate sites; the other, to define broad problems of distribution, time level and cultural affiliation, from an analysis of the materials and data collected. Such problems can then be attacked by systematic excavation of key sites.

A number of questions were probably left unanswered upon completion of this report, one of which concerns the identifying of the full range of architecture within the canyon. This can be accomplished only through excavation. Another concerns the possible reconstruction of the climate in the canyon over the years. Both of these problems can be answered in part by controlled excavation of a few chosen sites and the taking of pollen samples and the sampling for tree-ring dates

and growth patterns (indicating climatic conditions) from 42Sa1829. This site is suggested because it has the only possible datable wood found in the canyon. The cave site, 42Sa1822, should also be excavated. It shows occupation for a long period of time and has the possibility of producing some well preserved artifacts.

The one warning I make is that the sites within the canyon have been extensively vandalized in the past and will undoubtedly experience more in the future. If meaningful information is to be derived from North Cottonwood Canyon, serious work should begin soon.

I may be criticized by some for this report, in that sites are located and descriptions of them given. This, the critics say, gives the pot-hunter, or vandal (who are actually one and the same), access to the location of sites that can be explored and vandalized. My experience in North Cottonwood Canyon was that every identifiable site without exception had already been vandalized. In one instance, the front walls of structures had been pushed over the cliff, making it easier for the pot-hunter to shovel material out of the room and over the cliff face.

The site descriptions and locations are not for the benefit of the pot-hunter; he already knows where the sites are. This report is for the benefit of the archaeologist with the hope that additional needed work will be conducted in North Cottonwood Canyon.

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AN ARCHAEOLOGICAL SURVEY OF NORTH COTTONWOOD CANYON,

SAN JUAN COUNTY, SOUTHEASTERN UTAH

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M.A. Degree, April 1975

ABSTRACT

The results of an archaeological survey of North Cottonwood Canyon, San Juan County, southeastern Utah, are herein reported.

The purpose and background leading up to the survey are followed by a physical description of the canyon and a description of the 36 archaeological sites recorded. The cultural material collected and/or observed at the sites, including architecture, ceramics, and other miscellaneous artifacts, is described and discussed. This is followed by a distributional analysis between sites. This includes altitude, slope, water resources, and vegetation. Cultural materials in North Cottonwood Canyon are then compared with materials from related areas, including Montezuma Canyon, Beef Basin, Salt Creek, Indian Creek, Cedar Mesa, Hammond Canyon, and Glen Canyon. This is followed by the Conclusion, which discusses the time periods the canyon was inhabited, the lifeway of the prehistoric inhabitants, and some possibilities for further work that hopefully will be conducted in the canyon at a future date.

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