



A NINETEENTH CENTURY UTE BURIAL FROM NORTHEAST UTAH

by

Richard E. Fike
H. Blaine Phillips II

Chapters by

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Linda J. Scott, and Roderick S. Sprague



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The examination of the Pariette Draw burial, 1982-84, provided an excellent opportunity to work with the Ute Indians in better understanding tribal beliefs, practices and traditional lifeways, particularly those pertaining to the dead. The Bureau of Land Management, having lead responsibility for the project, shared a mutual spirit of harmony and cooperative effort with the Ute tribe. This spirit was also manifest in the contributions of those professionals who assisted in this study and participated in the 1983 symposium given at the sixteenth annual meeting of the Society for Historical Archaeology in Denver, Colorado. It is hoped that the public and professional communities find this volume a useful contribution to the understanding of native American Ute lifeways.

Richard E. Fike, Series Editor

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Abstract

In March 1982, the Bureau of Land Management (Utah) assisted by Archaeological Environmental Research Corporation, Bountiful, Utah, removed a human burial from Pariette Draw, Uintah County, Utah (see the back cover for location). The burial had been intentionally interred within a narrow, vertical crevice in a lone, fractured sandstone monolith. Its restricted position precluded use of routine state-of-the-art excavations on site, thus an alternate strategy was developed. A sheet metal scoop was devised and used to remove the burial bundle, surrounding materials and enclosed soils. These essentially intact materials were then transported to the laboratory for excavation and analysis.

The body, wrapped in a buffalo robe, was partially articulated and surrounded by numerous textiles and artifacts. The good preservation of the body, coupled with its recent historic age and artifact accompaniments, attracted experts who graciously donated their time to study and analyze the materials. The results of those studies are presented herein and comparatively related to extant data on other Ute burials and burial practices in the region.

Analysis of the skeletal remains and associated materials showed the individual to be a male Ute Indian, interred between 1850 and 1875, most likely 1860-1870; his age was 27-30 years. Following study, the body was returned to the Ute Tribe, Uintah and Ouray Reservation, and reburied in April 1983.

A Nineteenth Century Ute Burial From Northeast Utah

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INTRODUCTION

A crevice burial near Roosevelt, Utah was reported to the Bureau of Land Management (BLM) in February 1982. H. Blaine Phillips, II, Vernal District Archaeologist, recognized the archaeological importance of the site and the need for immediate protection or salvage. Word had spread among a large populace of oil and gas operators working in the area that "a body and artifacts had just been found". After several visits to the area with officials from the local Uintah and Ouray Indian Reservation a mutual decision was reached that if this important find was to be protected it must be removed.

Field work was conducted March 10-11, 1982, by individuals from BLM and Archaeological Environmental Research Corporation (AERC). The burial bundle was removed intact and transported to laboratory facilities in Bountiful, Utah, whereby controlled excavation could be undertaken without the problem of restricted surroundings. The excellent preservation of the remains along with numerous artifacts attracted specialists willing to donate their time and skills to properly study the materials and report the findings. The paucity of data on historic Indian burials is well known, thus the interest of the contributors makes the results and findings more substantive. Herein are the results of those studies. With the exception of minor editing, each author's section retains its integrity and individuality. Hopefully the information presented here will provide a comparative data base employable in future investigations.

LOCATION AND ENVIRONMENT

LOCATION

The burial, designated 42UN1225, was found in Pariette Draw in Uintah County, Utah, geographically located southwest of Vernal and south of Fort Duchesne and Bottle Hollow (Figures 1 and 2). The site is located on lands administered by the Bureau of Land Management (BLM). The present boundary of the Uintah and Ouray Indian Reservation is located about one mile north.

Pariette Draw is a broad, northwest to southeast descending, intermittent drainage within the Uinta Basin. It enters the Green River about two miles east of the burial site. Badlands is descriptive of the local topography. The climatic regime features low rainfall, high summer temperatures, and moderately cold winters. Plant communities of the region are influenced by precipitation, exposure, temperature, and evapotranspiration rates and form a varied and complicated mosaic (Figure 3).

GEOLOGY AND GEOMORPHOLOGY

The Uinta Basin is a subdivision of the Colorado Plateau province, encompassing an area of some 23,000 square miles in northeastern Utah and northwestern Colorado. Elevation varies from 4,650 feet near the burial site to 7,000 feet in the north and 9,000 feet to the south. The Basin, with an east-west topographic axis, is a downwarped structural trough filled with almost 10,000 feet of Lower Tertiary lacustrine, fluvial and volcanic sediments (Figure 4).

The Basin began to form during the Late Cretaceous Laramide Orogeny. At this time the Uinta Arch (ancestral to the Uinta Mountains) slowly rose and the Uinta Basin slowly subsided (Jones, 1964). With this subsidence the thick clastic beds making up the Wasatch Formation were deposited. Following deposition of the Wasatch Formation, a system of great interior lakes was formed, one of which was Lake Uinta. Within this lake system, sediments (predominately fine clastics) of the Green River Formation accumulated to a maximum thickness of about 7,000 feet. Sharp uplift of the Uinta Mountain source area occurred after the Green River Formation had been deposited and coarser river sediments of the succeeding Uinta and Duchesne River Formations accumulated. During the middle Tertiary, general uplift prevailed throughout the area and erosion began to carve out the topographic features evident today (Stokes and Heylmun, 1959). Physiographic changes have been minor during the past 20,000 years the most dramatic being the glaciation in the higher Uintas (Jones and Mackey, 1980).



Figure 1 — Location of Pariette Draw Burial

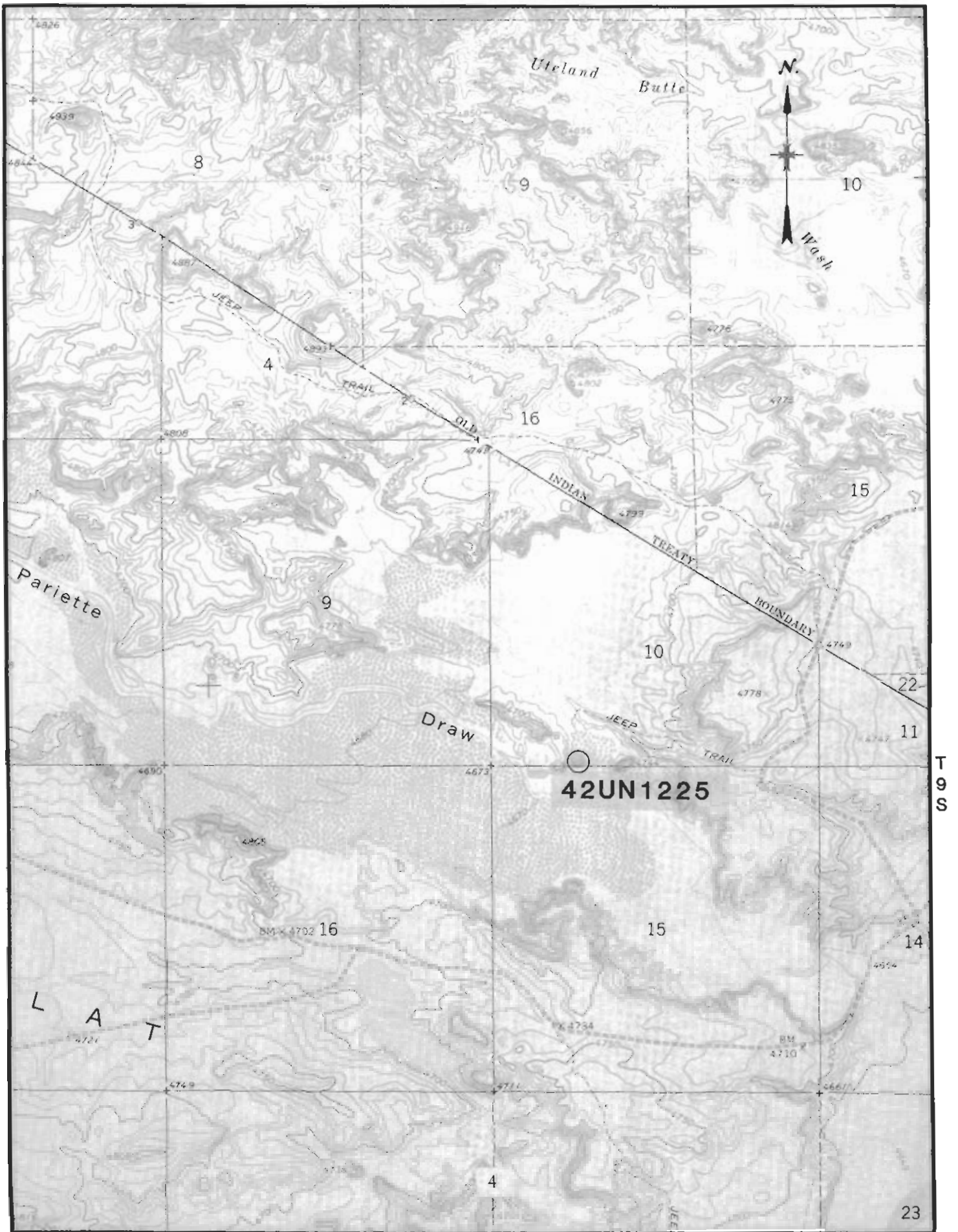


Figure 2 — Topographical Location of Burial-Uteland Butte Quadrangle

R 19 E



Figure 3 — General Setting — Pariette Draw

Clark and Marsell divide the Uinta Basin into six topographical districts. As shown in Figure 5, the burial is situated in the Tavaputs Plateau District near the juncture of three of these districts. The Tavaputs District dips from north to south and is characterized by considerable topographic relief, unique land forms, and broad interfluves separated by deeply incised stream channels and washes (Clark, 1957; Marsell, 1964).

The Pariette burial was located in a fractured sandstone monolith perched on a remnant cone of fluvial sediments of silt and mudstone (Uinta Formation, Figure 6). This monolith is one of several locally, that collectively forms an eastward trending mini-archipelago on the flood plain of Pariette Creek (north side). The monolith forms a prominent topographic feature in a roughly oval section of Pariette Draw. This oval measures approximately 12,500 feet on its east-west axis and 6,000 feet on its north-south axis. Within this area a broad lush floodplain exists — one of few in the Pariette Bench area.

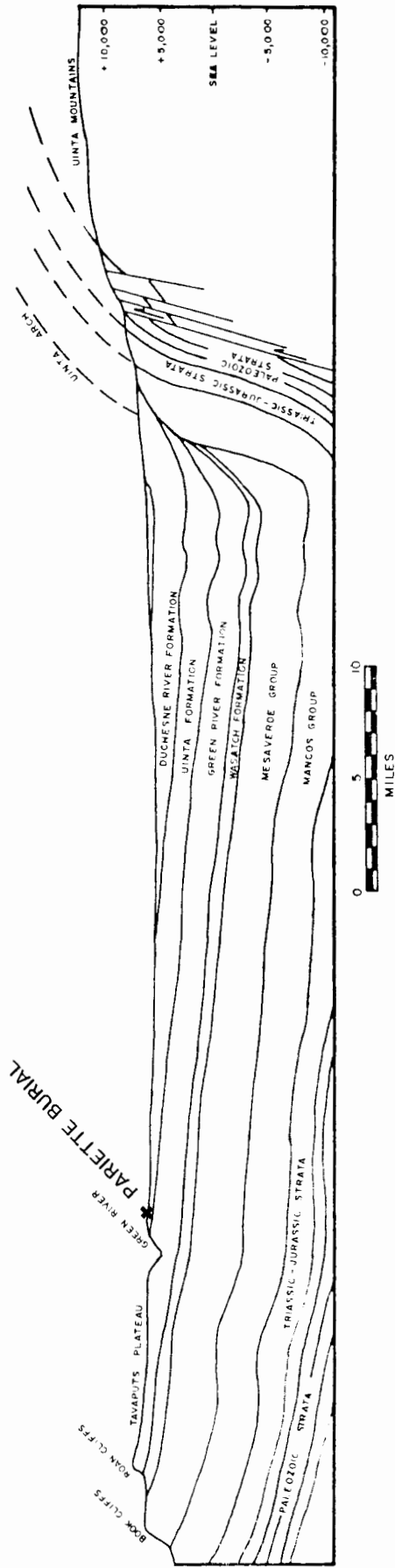


Figure 4 — Generalized Geological Cross Section of the Uinta Basin from the Book-cliffs to the Uinta Mountains (Childs, 1950)

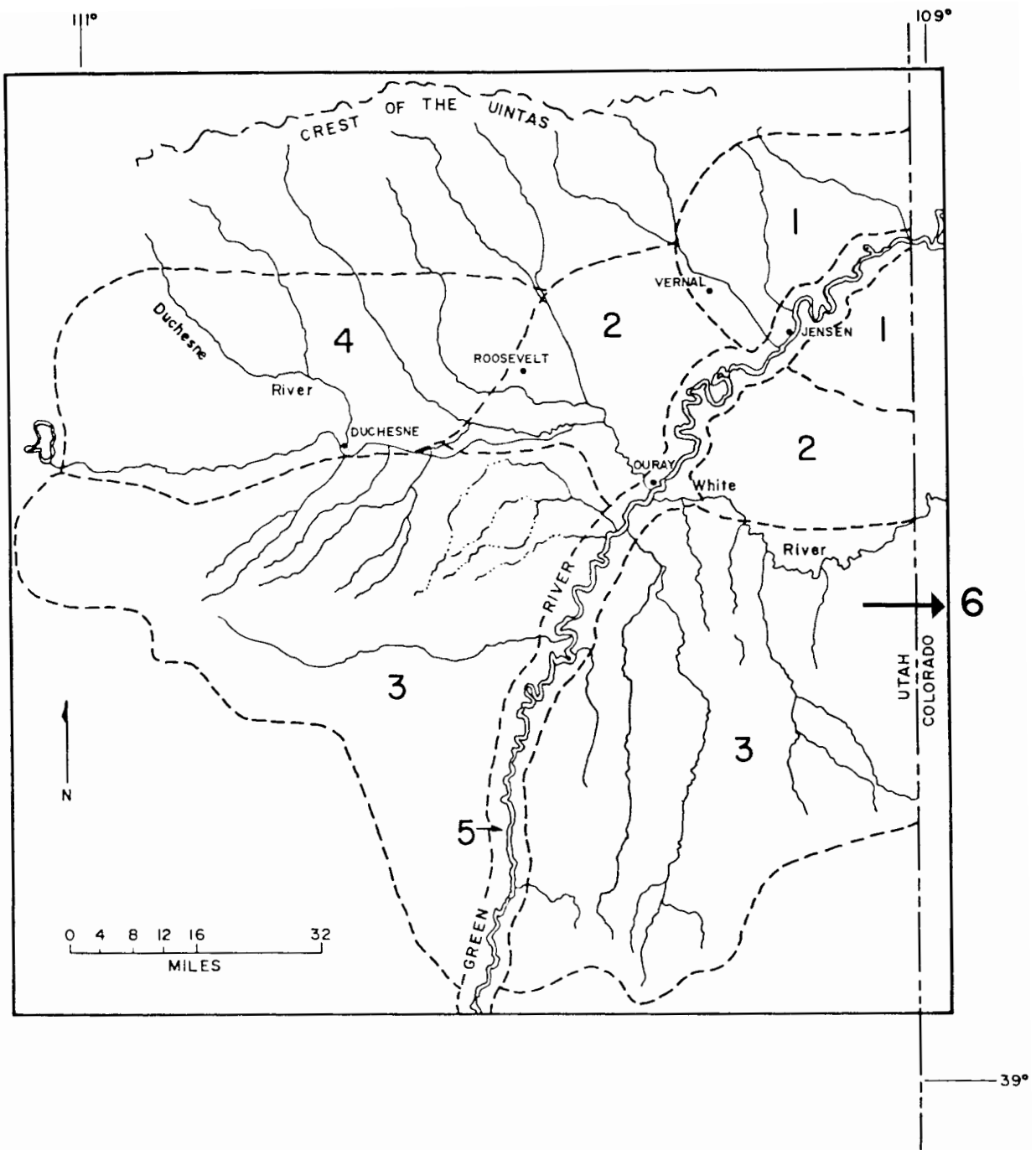


Figure 5 — Physiographic Regions of the Uinta Basin: 1) Northeastern Area; 2) Central Badlands District; 3) Tavaputs Plateau; 4) Upper Duchesne River Plateau; 5) Green River Valley; 6) Douglas Creek Area (Clark, 1957)

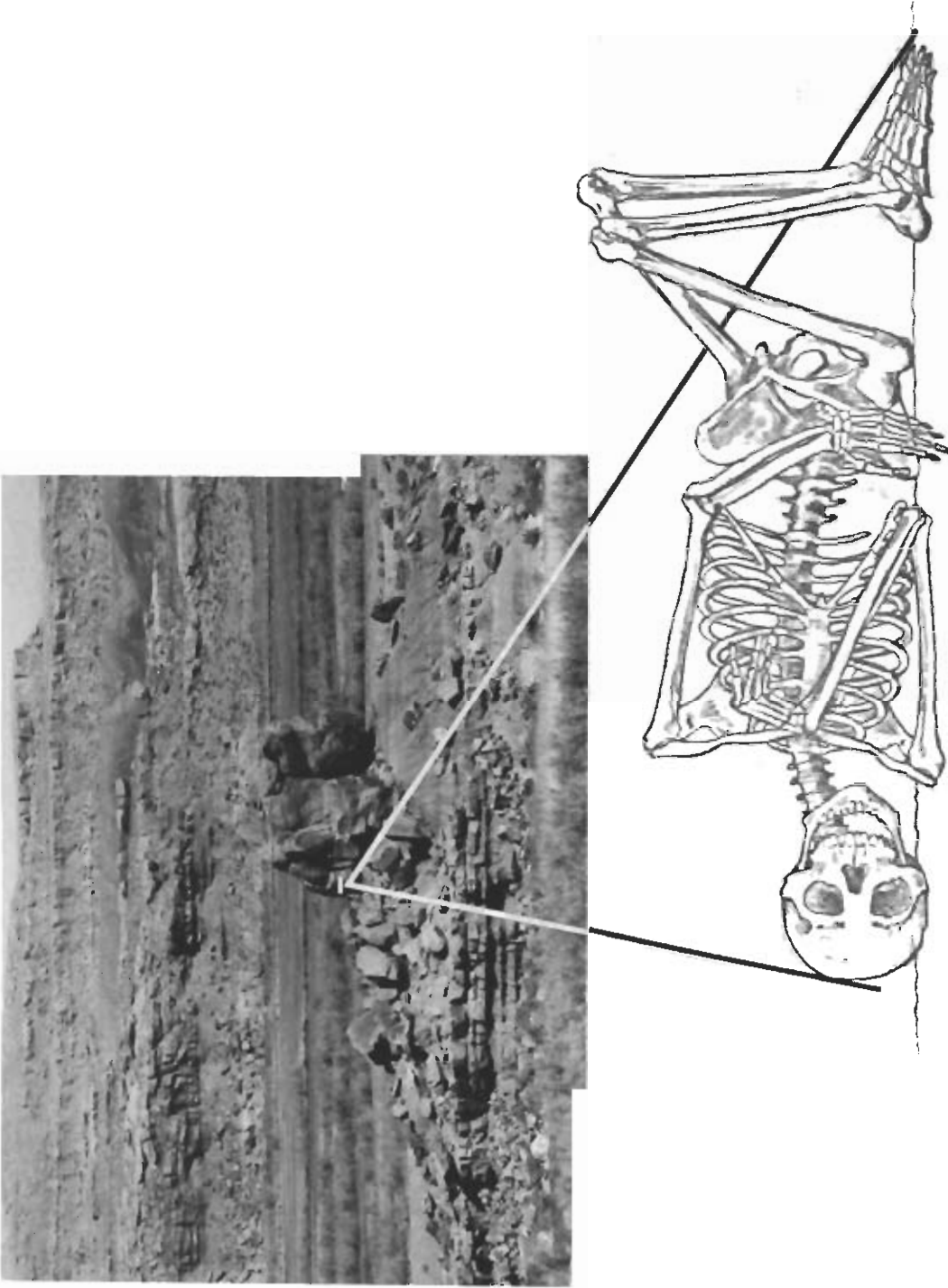


Figure 6 — Sandstone Monolith in Pariette Draw, Crevice Oriented Northwest (left), southeast (right).

SOILS

The soils in Pariette Draw are generally alkaline in nature with moderate to high percentages of gravelly sandy loams in areas characterized by alluvial fans, rolling hills, stream terraces and benches. The terraces and benches have short, moderately steep slopes that grade into narrow alluvial fans. Slope gradients range from 2-25 percent. The draw is drained by rills, gullies, and washes, and sheet erosion has formed a desert pavement over most of the area. (Leishman, 1979)

CLIMATE

The climate in the Uinta Basin is classified as semiarid with a mean annual precipitation of 6-24 inches. The mean average for Pariette Bench and adjacent areas, however, is less than 6 inches. Potential annual evapotranspiration ranges from 27-30 inches at Ouray to 21-24 inches at the base of the Uinta Mountains. The potential evapotranspiration for the Pariette area varies between 24-30 inches.

Uinta Basin winters are often the coldest in Utah. The area including Pariette Bench around Ouray, is considered a thermal sink with a mean January temperature of 0 degrees F. This area is also the hottest in the basin with mean July maximum temperatures of 88-92 degrees; frost free days average 120. (Sisson, et al, 1978)

VEGETATION

Sisson, et al, (1978) indicates that the Pariette Bench area exists in a mixed desert shrub zone. Zonal configuration and location is determined by rainfall, drainage and soils. The mixed desert shrub zone exists between 4,500 to 6,000 feet elevation; the burial site lies within this zone.

Table 1 (Vegetation) is a listing of plants for Pariette Draw and immediate environs prior to the establishment of a pond and dike system. This system was created to develop a wetland area which is based on the annual flow of Pariette Creek. Several miles upstream portions of Pariette Bench have been developed for agriculture. Traditionally, it has been postulated that the water in Pariette Creek resulted from the subterranean emergence of these waters. Recent studies by the Bureau of Reclamation indicates that the source waters is ground water flow from the Uinta Mountains and its primary drainages, i.e., Uinta, Strawberry, Duchesne Rivers, etc. Seasonal storms and melt from adjacent snow pack add to these groundwater flows in Pariette Draw (BLM Vegetative Surveys, 1964).

TABLE 1
VEGETATION—PARIETTE DRAW AND ENVIRONS

Common Name	Scientific Name	% Comp.
Bottom Lands 74		
Rush	<i>Juncus spp.</i>	5
Fox Tail Barley	<i>Hodeum jurbatum</i>	18
Misc. Weeds		3
Russian Thistle	<i>Salsola kali</i>	2
Greasewood	<i>Sarcobatus vermiculatus</i>	64
Rubber Rabbitbrush	<i>Chrysothamnus nauseosus</i>	3
Tamarix	<i>Tamarix spp.</i>	5
Eight Mile Flat Bench 72		
Galleta Grass	<i>Hilaria jamesii</i>	29
Fendler Three-awn	<i>Aristida fendleriana</i>	Trace
Inland Salt Grass	<i>Distichlis stricta</i>	1
Misc. Weeds		3
Russian Thistle	<i>Salsola kali</i>	2
Drummond Rockcress	<i>Arabis drummondi</i>	Trace
Goldrain-Tree	<i>Koelreuteria spp.</i>	5
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	1
Bud Sagebrush	<i>Artemisia spinescens</i>	2
Shadscale	<i>Atriplex confertifolia</i>	30
Douglas Rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	2
Prickly Pear	<i>Opuntia spp.</i>	
Rubber Rabbitbrush	<i>Chrysothamnus nauseosus</i>	6
Spiny Hopsage	<i>Grayia spinosa</i>	3
Spiny Horsebrush	<i>Tetradymia spinosa</i>	2
Fourwing Saltbush	<i>Atriplex canescens</i>	2
Nuttal Saltbush	<i>Atriplex nuttallii</i>	5
Greasewood	<i>Sarcobatus vermiculatus</i>	1
Mat Saltbush	<i>Atriplex corrugata</i>	1
Black Sagebrush	<i>Artemisia arbuscula nova</i>	Trace
Yucca	<i>Yucca spp.</i>	Trace
Longspine Horsebrush	<i>Tetradymia axillris</i>	Trace
Nevada Mormon Tea	<i>Ephedra nevadensis</i>	Trace
Benches just above Wetlands Area 82		
Galleta Grass	<i>Hilaria jamesii</i>	9
Inland Saltgrass	<i>Distichlis stricta</i>	4
Common Reed	<i>Phragmites communis</i>	Trace
Misc. Weeds		2
Russian Thistle	<i>Salsola kali</i>	5
Drummond Rockcress	<i>Arabis drummondi</i>	2
Halogeton	<i>Halogeton glomeratus</i>	Trace

Common Name	Scientific Name	% Comp.
White Goosefoot	<i>Chenopodium albescens</i>	2
Nevada Ephedra	<i>Ephedra nevadensis</i>	2
Black Sagebrush	<i>Artemisia arbuscula nova</i>	1
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	2
Greasewood	<i>Sarcobatus vermiculatus</i>	17
Fourwing Saltbush	<i>Atriplex canescens</i>	4
Spiny Hopsage	<i>Grayia spinosa</i>	Trace
Shadscale	<i>Atriplex confertifolia</i>	13
Pigmy Sagebrush	<i>Artemisia pugmaea</i>	Trace
True Mountain Mahogany	<i>Cercocarpus montanus</i>	Trace
Big Sagebrush	<i>Artemisia tridentata</i>	2
Rubber Rabbitbrush	<i>Chrysothamnus nauseosus</i>	12
Tamarix	<i>Tamarix spp.</i>	9
Nuttal Saltbrush	<i>Atriplex nuttallii</i>	14
Mat Saltbrush	<i>Atriplex corrugata</i>	Trace
Prickly Pear	<i>Opuntia spp.</i>	Trace
Longspine Horsebrush	<i>Tetradymia axillaris</i>	Trace
Buckwheat	<i>Eriogonum spp.</i>	Trace

Upper Bench North of Pariette Wash 83

Galleta Grass	<i>Hilaria jamesii</i>	15
Misc. Weeds		2
Russian Thistle	<i>Salsola kali</i>	2
White Goosefoot	<i>Chenopodium albescens</i>	2
Shadscale	<i>Atriplex confertifolia</i>	13
Spiny Horsebrush	<i>Tetradymia spinosa</i>	1
Nuttal Saltbrush	<i>Atriplex nuttallii</i>	27
Nevada Ephedra	<i>Ephedra nevadensis</i>	4
Rubber Rabbitbrush	<i>Chrysothamnus nauseosus</i>	12
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	3
Prickly Pear	<i>Opuntia spp.</i>	1
Douglas Rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	1
Black Sagebrush	<i>Artemisia arbuscula nova</i>	2
Mat Saltbrush	<i>Atriplex corrugata</i>	1
Green Molly	<i>Kochia americana</i>	3
Spiny Hopsage	<i>Grayia spinosa</i>	Trace
Eriogonum	<i>Eriogonum spp.</i>	Trace
Fourwing Saltbush	<i>Atriplex canescens</i>	Trace
Greasewood	<i>Sarcobatus vermiculatus</i>	Trace

FAUNA

Faunal data are derived from the BLM's Vernal District, Myton Habitat Plan, which covers a region much larger than the Pariette area. Table 2 is taken from a larger list in the Plan.

TABLE 2
PARIETTE DRAW AND ENVIRONS

Common Name	Scientific Name
Carp	<i>Cyprinus carpio</i>
Utah Chub	<i>Gila atraria</i>
Humpback Chub	<i>Gila cypha</i>
Bonytail Chub	<i>Gila elegans</i>
Red Shiner	<i>Notropis lutrensis</i>
Fathead Minnow	<i>Pimephales promelas</i>
Colorado Squawfish	<i>Ptychocheilus lucius</i>
Speckled Dace	<i>Rhinichthys osculus</i>
Redside Shiner	<i>Richardsonius balteatus</i>
Bluehead Sucker	<i>Catostomus discobolus</i>
Flannelmouth Sucker	<i>Catostomus latipinnis</i>
Razorback Sucker	<i>Xyrauchen texanus</i>
Black Bullhead	<i>Ictalurus melas</i>
Channel Catfish	<i>Ictalurus punctatus</i>
Green Sunfish	<i>Lepomis cyanellus</i>
Great Basin Spadefoot	<i>Scaphiopus intermontanus</i>
Woodhouse's Toad	<i>Bufo woodhousei</i>
Northern Leopard Frog	<i>Rana pipiens</i>
Northern Whiptail	<i>Cnemidophorus tigris septentrionalis</i>
Mountain Shorthorned Lizard	<i>Phrynosoma fouglassi hernandesi</i>
Northern Desert Horned Lizard	<i>Phrynosoma platyrhinos platyrhinos</i>
Southern Plateau Lizard	<i>Sceloporus undulatus tristichus</i>
Northern Sideblotched Lizard	<i>Uta stansburiana stansburiana</i>
Northern Sagebrush Lizard	<i>Sceloporus graciosus graciosus</i>
Eastern Fence Lizard	
Tree Lizard	
Western Yellowbellied Racer	<i>Coluber constrictor mormon</i>
Great Basin Gopher Snake	<i>Pituophis melanoleucus deserticola</i>
Wandering Garter Snake	<i>Thamnophis elegans vagrans</i>
Desert Striped Whipsnake	<i>Masticophis taeniatus taeniatus</i>
Midget Faded Rattlesnake	<i>Crotalus viridis concolor</i>
Grebes	<i>Podicipedidae</i>
Cormorants	<i>Phalacrocoracidae</i>
Hérons and Bitterns	<i>Ardeidae</i>
Ibises	<i>Threskiornithidae</i>
Ducks and Gease	<i>Anitadae</i>
Mergansers	<i>Merginae</i>
Vultures	<i>Cathartidae</i>
Hawks, Harriers, Eagles	<i>Accipitridae</i>
Prairie Falcon	<i>Falco mexicanus</i>
Peregrine Falcon	<i>Falco peregrinus</i>
Sage Grouse	<i>Centrocercus urophasianus</i>
Ring-Necked Pheasant	<i>Phasianus colchicus</i>

Common Name	Scientific Name
Greater Sandhill Crane	<i>Grus canadensis</i>
Rails, Coots	<i>Rallidae</i>
Plovers	<i>Charadriidae</i>
Snipe, Sandpipers	<i>Scolopacidae</i>
Avocets and Stilts	<i>Recurvirostridae</i>
Phalaropes	<i>Phalaropodidae</i>
Gulls and Terns	<i>Laridae</i>
Pigeons and Doves	<i>Columbidae</i>
Owls	<i>Strigidae</i>
Goatsuckers	<i>Caprimulgidae</i>
Swifts	<i>Apodidae</i>
Hummingbirds	<i>Trochilidae</i>
Kingfishers	<i>Alcedinidae</i>
Common Flicker	<i>Picidae</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Kay's Phoebe	<i>Sayornis saya</i>
Larks	<i>Alaudidae</i>
Swallows	<i>Hirundinidae</i>
Black-Billed Magpie	<i>Pica pica</i>
Common Raven	<i>Corvus corax</i>
Common Crow	<i>Corvus brachyrhynchos</i>
Wrens	<i>Troglodytidae</i>
Thrashers	<i>Mimidae</i>
American Robin	<i>Turdus migratorius</i>
Mountain Bluebird	<i>Sialia currucoides</i>
Ruby-Crowned Kinglet	<i>Regulus calendula</i>
Shrikes	<i>Laniidae</i>
Yellow Warbler	<i>Dendroica petechia</i>
Adubons Warbler	<i>Dendroica coronata</i>
Yellowthroat	<i>Geothlypis trichas</i>
Meadowlarks, Blackbirds, Orioles	<i>Icteridae</i>
Tanagers	<i>Thraupidae</i>
Black-Headed Grosbeak	<i>Passerina amoena</i>
American Goldfinch	<i>Spinus tristis</i>
Brown Towhee	<i>Pipilo fuscus</i>
Chipping Grosbeak	
Dark-Eyed Junco	<i>Junco hyemalis</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Bairds Sparrow	<i>Ammodramus bairdii</i>
White-Crowned Sparrow	<i>Zonotrichia leucophrys</i>
Fox Sparrow	<i>Passerina iliaca</i>
Sage Sparrow	<i>Amphispiza belli</i>
Vesper Sparrow	<i>Pooecetes gramineus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Merrian Shrew	<i>Sorex merriami</i>
Vagrant Shrew	<i>Sorex vagrans</i>
Bats	<i>Chiroptera</i>
Raccoons and Coatis	<i>Procyonidae</i>

Common Name	Scientific Name
Rigntails	<i>Bassariscidae</i>
Long Tail Weasel	<i>Mustela frenata</i>
Short Tail Weasel	
Badger	<i>Taxidea taxus</i>
Striped Skunk	<i>Mephitis mephitis</i>
Coyote	<i>Canis latrans</i>
Red Fox	<i>Vulpes fulva</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Mountain Lion	<i>Felis concolor</i>
Bobcat	<i>Lynx rufus</i>
Yellowbelly Marmot	<i>Marmota flaviventris</i>
Whitetail Prairie Dog	<i>Cynomys gunnisoni</i>
Rock Squirrel	<i>Citellus variegatus</i>
Golden-Mantled Squirrel	<i>Citellus lateralis</i>
Whitetail Antelope Squirrel	<i>Ammospermophilus leucurus</i>
Thirteen Lined Squirrel	
Apache Pocket Mouse	<i>Perognathus apache</i>
Kangaroo Rat	<i>Dipodomys ordi</i>
Beaver	<i>Castor canadensis</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Desert Woodrat	<i>Neotoma lepida</i>
Bushytail Woodrat	<i>Neotoma cinerea</i>
Muskrat	<i>Ondatra zibethica</i>
Porcupine	<i>Erethizon dorsatum</i>
Whitetail Jackrabbit	<i>Lepus townsendi</i>
Blacktail Jackrabbit	<i>Lepus californicus</i>
Desert Cottontail	<i>Sylvilagus auduboni</i>
Elk	<i>Cervus canadensis</i>
Mule Deer	<i>Odocoileus hemionus</i>
Pronghorn Antelope	<i>Antilocapra americana</i>

EXCAVATION

by

F.R. Hauck

INTRODUCTION

On March 10 and 11, 1982, the Pariette Draw burial was removed under the supervision of Richard Fike and F.R. Hauck. They were assisted by Blaine Phillips and Craig Harmon, BLM archaeologists and Jacki and Keith Montgomery, AERC staff archaeologists. Prior to burial removal, several visits were made to the site to evaluate the significance of the burial and to determine the feasibility of any actions other than removal of the remains. The initial site testing was conducted on February 23, 1982, by Blaine Phillips, Vernal District Archaeologist, assisted by Ron Trogstad. Phillips' visit was made in response to the urgent request of the BLM District Manager who had learned that the burial was being disturbed by an amateur collector. Loose articles taken from the burial (Figure 7) were recovered and tagged by Phillips, who also uncovered the cranial area and placed a test excavation in the loose soils below the burial to determine the depth of interment (Figures 8-12).

Fike and Hauck initially visited the burial site on March 4, 1982, to determine whether the significant find could be preserved *in situ*. These archaeologists were also prepared to develop an excavation program which would permit the recovery of the burial should *in situ* preservation be impractical. The burial was found to be very fragile and situated within a narrow crack in the monolith (Figures 8 and 10).

The position of the burial between the surface soil horizon and the rodent midden further complicated the option of preserving the site *in situ*. The archaeologists determined that the burial would be vandalized if left on the site and its elevation on the butte precluded *in situ* reburial or cementing as viable options.

These preliminary assessments resulted in the development of a two phase excavation program which was initiated on March 10. The first phase was concerned with the compact recovery of the burial from its location in Pariette Draw. The archaeologists determined that the fragile condition of the body and artifacts and its almost inaccessible position in the narrow crack precluded a controlled excavation while on site. Therefore, the initial phase of careful recovery from the monolith was followed by the uncovering and analysis of the remains and artifacts in the second phase on March 25 and 26 in the AERC laboratory. These two phases of excavation are detailed in sections which follow.



Figure 7 — Burial Material Removed Prior to Excavation



Figure 8 — Location In Crevice Prior to Removal



Figure 9 — Exposed Cranium and Upper Torso After Trowel Test



Figure 10 — Further Trowel Testing



Figure 11 — Closeup of Burial and Underlying Sediments



Figure 12 — Closeup of the Skull and Associated Wrappings



Figure 13 — Monolith and General Site View

PHASE 1 — REMOVAL OF THE BURIAL

The Ute burial at site 42UN1225 had been placed within a narrow crack in a sandstone monolith situated upon a small butte, (Figure 13). The cleft averaged about 34cm in width for the first 1.5 meters from the opening and narrowed to 20cm in width at the 3 meter point. The crack opened to the northwest on an azimuth of 318°. The axis of the flexed body within the cleft were feet to the southeast and cranium to the northwest with the face oriented to the southwest (Figure 6). The narrowness of the crack and the size of the body precluded its being deposited after rigor mortis had occurred. The body had to have been very flexible to have been arranged to meet the requirements afforded by the narrow cleft. Initial observations established that very little excavation of a burial pit occurred prior to interment. Indeed, the loose sandy soil in the cleft was only nominally disturbed by the burial. The predominant covering over the shroud appeared to have been a thin layer of soil followed by greasewood sticks and locally available brush. The close proximity of the body to the surface with the flexed knees possibly covered only by the leather shrouds and loose brush accelerated the destruction of the lower extremities through the agents of decomposition and the subsequent occupation by rodents. The burial also provided a natural shelter for generations of pack rats.

Upon arrival to commence Phase 1 of the excavation, the archaeologists established a permanent datum by inscribing a large "X" in the northeast wall of the cleft near its mouth but above the burial. All measurements of the crack and excavation were coordinated to that datum. The datum was determined necessary not only for good procedure but also because loose human remains previously obtained from the

cleft contained bones thought to have been from several different individuals. The potential existed, therefore, for a mixed burial or the existence of several separate burials within the cleft.

While the primary datum was being marked and a lighting system developed to illuminate the recesses of the cleft, archaeologists began photographing the cleft and burial in both color and black and white. A surface collection was also initiated of all identifiable artifacts which were not in their original positions (Figure 14).

The burial occupied a horizontal space of 1.3 meters with the outer portion of the cranium situated 70cm south of the datum and at ca. 95cm below the datum. The interface between the sandy soil and the bottom of the blankets supporting the cranium at the base of the burial was 1.22m below the datum (Figures 15-17).

Sawhorses and planks were used to construct a walkway above the burial so the excavators could acquire access to the rear of the cleft without disturbing the remains. Once this walkway was installed and appropriate lighting was made available by utilizing a portable gasoline generator, the surface artifacts were collected from the disturbed soil. To accomplish this task and maintain horizontal control of the artifacts, three separate zones for collection were determined in coordination with the body's association to the datum, and all objects taken from each zone were separately stored. Had the burial contained mixed remains of two or more individuals, these controls would have insured an accurate reconstruction.

With completion of the preliminary collection and the removal of loose artifacts and extraneous materials from above the body, the archaeologists prepared to test the interior of the rock cavity to identify the southeastern end of the burial and to determine the presence of any other burials immediately below or adjacent to the identified remains. This was accomplished by opening a 25cm long test situated some 1.5 meters to the south and 1 meter below the datum. This test produced leather, bone, and metal fragments which had been associated with the feet. Moccasins and a harness were also recovered. The soils were found to have been churned by rodent activity; however, the excavator was able to determine that no other burials existed in the rear of the cleft or immediately below the extremities of the known remains. With this information, coupled with the knowledge that Phillips' previous testing for a lower burial below the cranium had produced negative results (Figure 15), the archaeologists were prepared to initiate action to remove the burial with only nominal apprehension that the activity would disturb other unknown remains.

On March 11, the removal of the burial was accomplished. To facilitate this activity and still preserve the burial bundle in its partially intact condition, the archaeologists prepared a 5' x 4' rectangle of thin sheet metal to be used as a scoop. Two edges of the sheet were bent under to form carrying handles extending the four foot length of the sheet. The sheet was then bent into a "U" shape for insertion under the length of the burial. To curtail drag caused by friction generated during the movement of the



Figure 14 — Surface Collections



Figure 15 — Interface Between Burial and Basal Sediments



Figure 16 — View of Body Before Removal



Figure 17 — View of Body Before Removal

scoop under the burial, one team member excavated the sandy soil below the burial while Fike pushed the scoop and Hauck, situated within the cleft, pulled the scoop through (Figures 18 and 19).

The difficulty of moving the scoop increased as the weight of the burial increased until K. Montgomery was required to wedge himself in the crack, vertically above the burial, to aid in pulling the scoop through the cleft. Figures 20 and 21 demonstrate the coordinated effort required by the team in accomplishing the task.

When the entire burial was contained within the scoop (Figure 22), the instrument was carefully extracted from the cleft and placed within a large cardboard box which had been constructed to hold the scoop and remains (Figure 23 and 24). The difficulty of transporting the burial intact between the site and the laboratory had been foreseen and appropriate padding and support were used to insure the preservation of the archaeological context which had existed in the burial bundle while on site. Although several loose bones in the pelvic region were somewhat disturbed during the excavation (Figures 23 and 24), the remainder of the body was not affected.

After removal of the body and its associated artifacts, a test pit was placed below the original position of the burial to determine whether any other burials existed within the sandy soils inside the cleft. The pit was initiated at 1.75 meters below datum and lay from .5 to 1.5 meters to the southeast of the datum. It was eventually excavated to a depth of 2.5 meters below datum with negative results. The soils under the burial were found to have been culturally sterile prior to interment of the individual. The only cultural remains found in those soils were reddish dyes and seed beads which had leached/filtered down through the soil and one rib which had been transported to a secondary position under the cranium by rodent action.

The archaeologists were able to conclude at the completion of Phase 1 that the body had been placed in the cleft and then covered with several layers of leather goods, only a beaded leather object which had been placed under the right side of the cranium extended beneath the body.

PHASE 2 — LABORATORY PROCEDURES

The final phase of the excavation of the burial occurred in the AERC laboratory. Initially, a well lighted working area was prepared and a series of black and white as well as color photographs were taken of the remains on the metal scoop after they had been taken from the storage box (Figure 25).

The burial was photographed using various films, lenses, filters and F-stops in order to determine the best combinations to be used during the later evaluation and cleaning period. To facilitate control over the number and variety of photographs which would be taken of the burial, several positions for placing the camera were numbered in a counterclockwise sequence beginning with position No. 1 at the lower

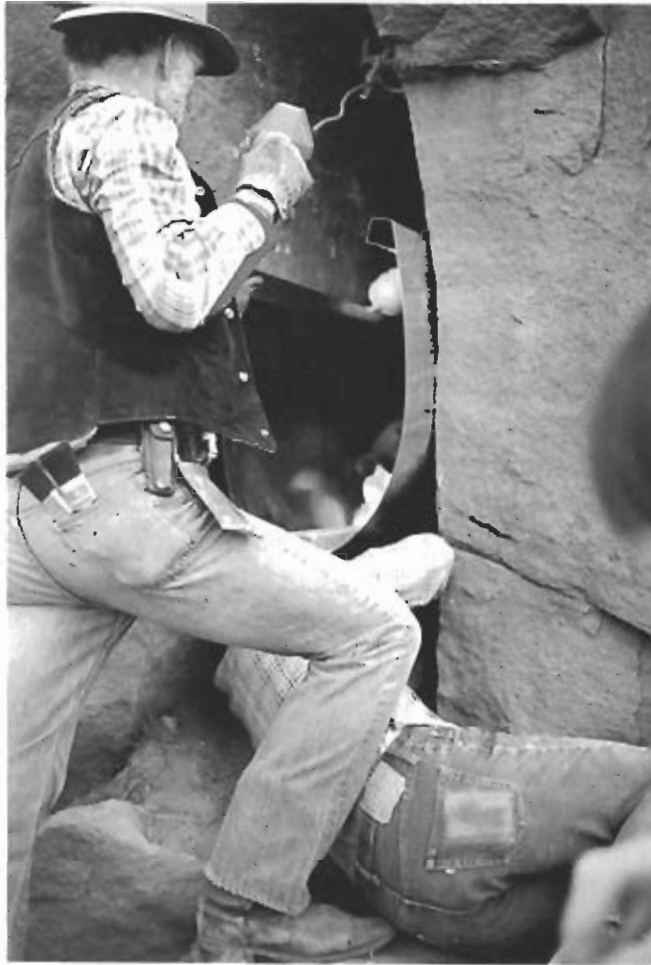


Figure 18 — Placing Metal Scoop Under Burial

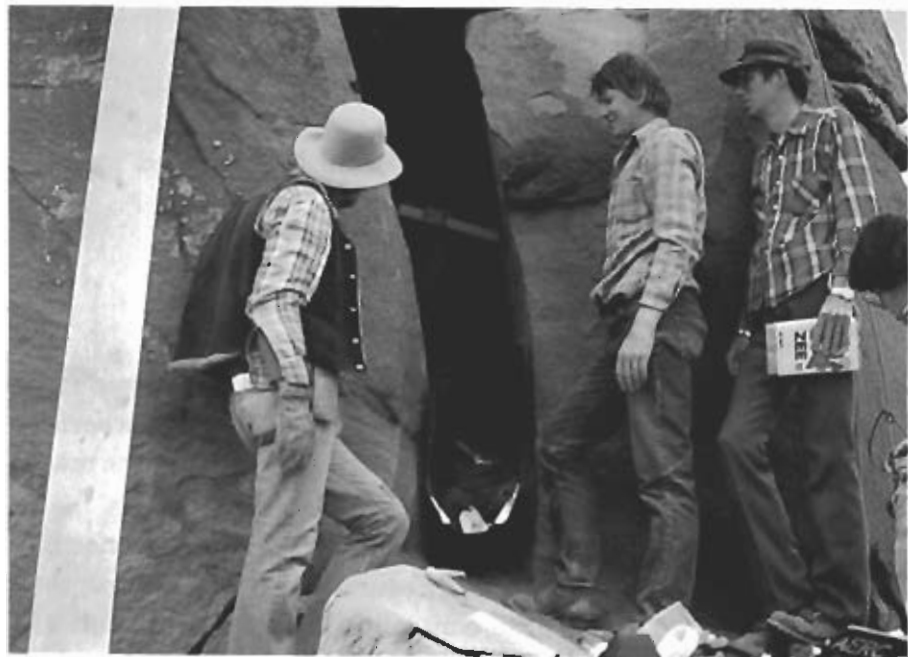


Figure 19 — Sheet Metal Scoop In Place Prior to Removal

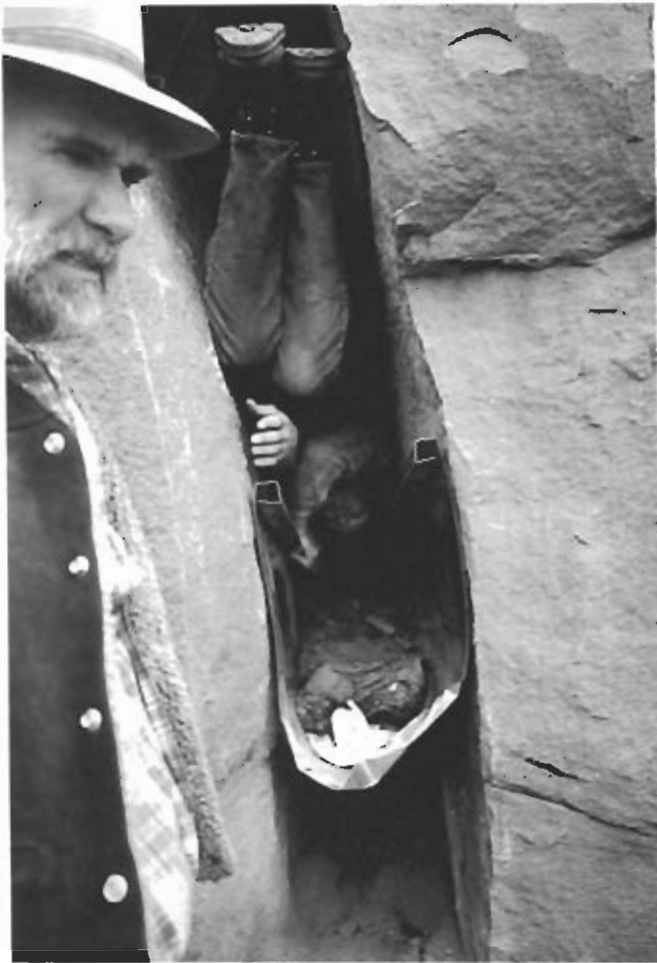


Figure 20 — View of Working Conditions Within the Crevice



Figure 21 — View of Working Conditions within the Crevice



Figure 22 — Burial Within the Scoop



Figure 23 — Burial In Prepared Cardboard Box



Figure 24 — Burial In Prepared Cardboard Box

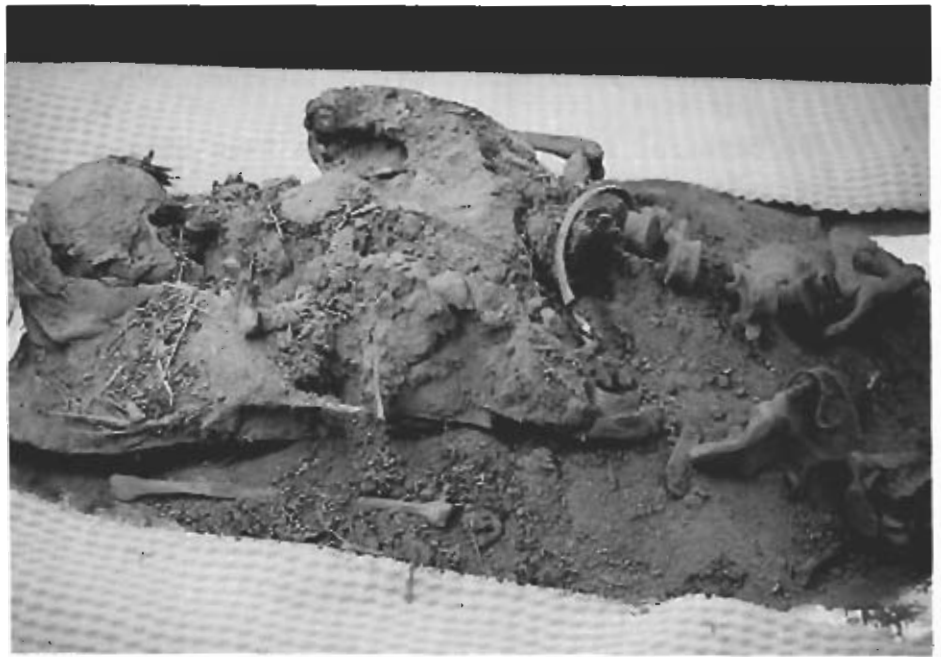


Figure 25 — Burial in Laboratory

left of the remains and proceeding twice around the body to finish in position No. 12 which was an elevated view of the length of the burial with the cranium in the left of the frame and the lower extremities to the right. Figure 25 was taken from position 12 and shows the condition of the burial immediately after being placed on the work area and prior to initial cleaning.

On March 18, the preliminary cleaning of the burial bundle was accomplished by removing much of the excess soil, rodent dung, and noncultural debris which had covered the exposed body and fabrics. Figures 26 and 27 show details of cloth and bead work associated with the cranium area. The blanket fragments in Figure 27 are of the Navajo saddle blanket which was placed over the leather shrouds. Beadwork details in Figure 27 are associated with the red cloth panel sewn to the leather which was placed under the right side of the cranium prior to the body's being covered with the leather shrouds.

The main cleaning and extraction of cultural material from the burial bundle occurred on March 25 and 26. R. Fike, Linda Scott of Palynological Analysts, and F.R. Hauck conducted the excavation assisted by Jacki Montgomery and Diana Penley of AERC. Figures 28 and 29 show the condition of the remains preparatory to the removal of the upper layers of leather shroud and blanket fragments. The outline of the trimmed metal scoop is visible flanking the corpse in Figure 29. Figures 30-32 show close-ups of various features. The occipital region is depicted in Figure 30, in view are vertebrae, braids, and the rear left side of the mandible. The parietals and beaded object are shown in Figure 31, but the face is still buried in the leather shroud. Figure 32 shows the face from an elevated camera angle after the cranium had been allowed to roll away from its contact with the leather shroud; part of the extensive beaded strings can be discerned over the chest cavity.

To begin, all loose bones associated from the lower extremities were carefully removed, inventoried and boxed for later analysis. Soils not supporting the body were also removed and sacked separately for screening. The loose braids and hair were detached from the burial and boxed. At this point Linda Scott began obtaining pollen samples from the roof of the mouth and arm pit areas and collecting grass samples found around the cranium. The leather shrouds were gradually removed layer-by-layer until the various associations of blanket, leather, and clothing fragments were identified and their sequence of arrangement during interment was understood. The cranium was then removed to permit better access to the chest and left shoulder area. This activity exposed a pendant-brass button device which had been attached to a front lock of the individual's hair and had been placed directly over his nose during the interment (Figure 33).



Figure 26 — Detail of the Cloth and Bead Work Associated with Cranial Area



Figure 27 — Detail of the Cloth and Bead Work Associated with Cranial Area



Figure 28 — Side View of Body Showing Relationship of Textiles to Body

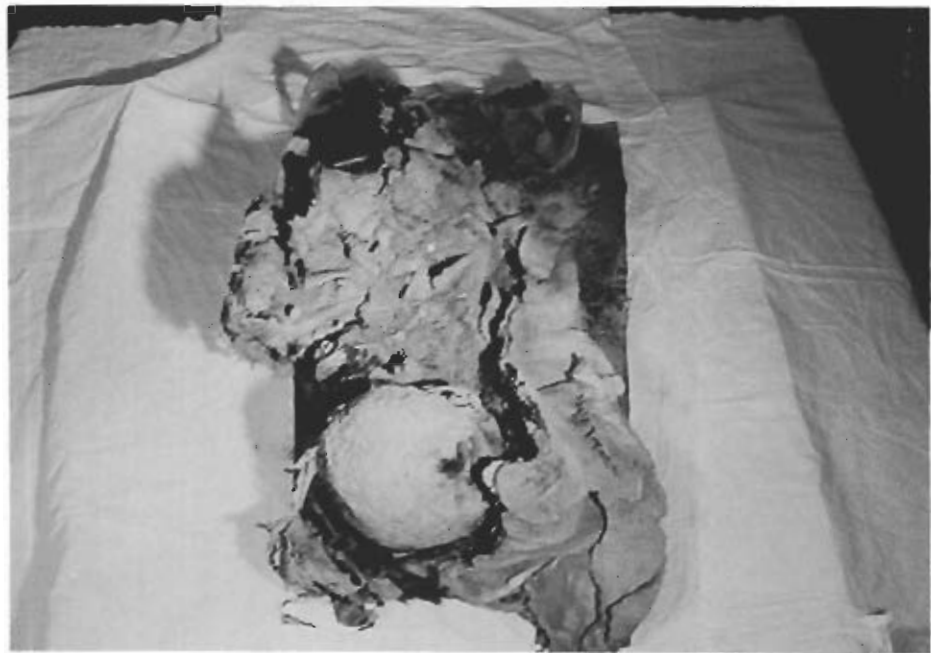


Figure 29 — End View of Body with Associated Buttons



Figure 30 — Closeup of Features and Hair Roll



Figure 31 — Closeup of Cranium, Textiles



Figure 32 — Closeup of the Body; Note Bead Strand on Sternum



Figure 33 — Hair Plate and Associated Buttons

Cleaning the remaining soils and debris from the left shoulder and exposed left humerus permitted a detailed examination of the patterned shirt and associated braid (Figure 34). This fabric was then carefully removed from the shoulder and back using steam to make the material flexible. A vaporizer and lightweight steam iron were used to increase the pliability of fabrics and leathers during the dismantling of the burial.

The cleaning and exposure of the torso was accomplished by removing the Navajo blanket and leather shroud fragments to expose the mummified right hand covering the multiple strands of large beads which had been placed on the chest (Figure 36). Since the bead strands were very fragile, a system of reference labels were attached to various exposed beads on different strands to aid in later reconstruction should the strands separate while being removed from the body. These labels are partially visible in Figure 35.

The right hand was detached from its position on the chest to further expose the large bead strands as shown in Figure 36. In this photograph, the articulations between the left humerus, clavicle, and scapula are demonstrated. The complex blue and white beaded system which may have been part of the clothing is also apparent.

Paint brushes, air brushes, tweezers, and dental picks were used to clean the torso until the bead strands could easily be removed without jeopardizing their associations (Figure 37). With the final extraction of remaining clothing fragments, the rib cage was cleaned of the interior soils and debris as shown in Figure 38. These soils were then sifted through a fine mesh metal screen to recover any artifacts or human remains which may have fallen into the rib cavity.

It was determined that decomposition and subsequent parasite activity in the digestive organs of the lower torso were responsible for the complete loss of all muscle systems, clothing, and shroud below the rib cage. Only the bones of the lower torso and legs remained and post interment rodent activity apparently displaced those articles from their primary associations.

The left ulna and radius were probably originally placed over the abdominal area, subsequently resulting in the complete dismemberment of the lower left arm from the elbow. The right arm was flexed and the radius and ulna placed across the right chest with the wrist flexed and fingers extending toward the lower extremities. The clothing and strands of large beads which separated the right hand from direct contact with the rib structure contributed to the hand's preservation and eventual mummification.



Figure 34 — Hair Braid and Cotton Shirt



Figure 35 — Strands of Wound Beads in Context



Figure 36 — Strands of Wound Beads in Context



Figure 37 — Numbering and Removing Beads From the Body



Figure 38 — Thoracic Section of Body After Cleaning and Removal of Artifacts

The upper torso was dressed in a striped shirt which had been machine stitched. The collar and chest of the shirt were of a placard-style which opened only to the sternum. The chest buttons were missing; however, one white sleeve button was found intact on fragments of the right sleeve. The patterned red fabric associated with the left shoulder was determined to have been a large cloth which had been draped around the individual's shoulders over his shirt. At interment his braids were arranged over his neck and over the patterned cloth.

Following the Phase II procedures, bead, fabric, leather, and human remains were separately inventoried and boxed for individual analysis. The results of these analyses are provided in the subsequent chapters.

ANALYSES OF THE HISTORIC ARTIFACTS AND EVIDENCE FROM THE POLLEN, FIBERS, AND HAIR

by

Douglas D. and Linda J. Scott

INTRODUCTION

Very little is known about the burial practices of the historic Ute Indians or the types of material goods that were placed with a body at the time of interment. Following Metcalf's (1974) lead, we have chosen a descriptive rather than an interpretive approach because of the paucity of data concerning the material culture disposal pattern for Ute burials. Hopefully, the descriptions will add to a growing data base and thus enable a more interpretive form of statement at a future date.

The variety of artifacts and textiles from this burial provide a stunning array of materials for study. Generally we have described the artifacts by material, form, and, where possible, function. Many of the artifacts are composite in nature, so the dominant material is used as a guide for inclusion of the artifact within a descriptive group. Measurements are done in English units because the majority of materials are of Anglo-American origin and that was the unit of measurement for the manufacturing process.

Associated with the analysis of the artifacts is the study of pollen, fiber, and hair. The microscopic analysis of fiber from the fabrics and hair found on two objects was undertaken in order to identify the source of the fibers and hair. Pollen analysis was employed to determine if there had been any ceremonial use of plants with the burial.

POLLEN, FIBERS, AND DYES

Six pollen samples were taken from the burial during laboratory processing. Samples were taken in the area of both arm pits, the rib cage, under the pelvis, inside the mouth, and from the forehead. These locations were selected as the most probable areas to obtain pollen data concerning the ritual use of plants in burials (Bohrer and Adams, 1977). The pollen observed in these samples appears to be primarily modern, which is not surprising considering that the body was wedged into a rock crevice rather than having been buried in the ground. This burial situation provided opportunity for gradual filling in of the area around the body with local wind-blown sands and pollen. In addition, an active packrat midden was observed on top of the burial, which may also have contributed to the deposition of modern pollen. The burial was taken from the crevice and kept in a laboratory for a few weeks prior to actual removal of the dirt from the body.

The pollen observed in the samples is typical of that expected from the modern vegetation of the area around the burial (Table 3). Only the sample taken from the forehead, which was relatively well protected by a buffalo robe, contained much pollen displaying signs of deterioration, which would be expected after approximately 100 years in an alkaline soil. Comparison of this sample with the others indicated that there has been little change in the composition of the vegetation near the burial during the past 100 years. The sample contained no unique pollen or pollen frequencies which might suggest ritual use of plants.

TABLE 3
POLLEN FREQUENCIES IN SAMPLES FROM 42UN1225

Pollen Type	Sample Number					
	1	2	3	4	5	6
ARBOREAL POLLEN	22.0	11.0	20.5	13.5	16.0	14.0
<i>Abies</i> (fir)		0.5	0.5	0.5	1.0	
<i>Acer negundo</i> (boxelder)					0.5	
<i>Alnus</i> (alder)			1.0			
<i>Celtis</i> (hackberry)			0.5			
<i>Juniperus</i> (juniper)	6.0	1.5	6.0	4.0	1.0	2.5
<i>Picea</i> (spruce)			0.5		0.5	
<i>Pinus</i> (pine)	15.0	6.0	7.5	9.0	10.5	10.5
<i>Populus</i> (cottonwood)	1.0		1.7		0.5	
<i>Quercus</i> (oak)		2.5	1.0	0.5	2.5	
<i>Salix</i> (willow)		0.5	0.5	0.5		
NON-ARBOREAL POLLEN						
Alismataceae (water-plantain family)						1.5
Cheno-ams (goosefoot and pigweed)	5.0	25.0	29.5	30.0	37.0	38.5
<i>Sarcobatus</i> (greasewood)	13.0	23.0	14.5	13.5	12.5	8.0
<i>Cleome</i> (beeweed)	1.0	12.0	1.5	10.0	2.0	11.5
Compositae (sunflower family)						
<i>Artemisia</i> (sagebrush)	22.0	4.5	12.5	4.0	3.5	6.5
Low-spine (ragweed, cocklebur, etc)	24.0	8.0	10.0	16.5	15.5	7.0
High-spine (rabbitbrush, snakeweed)	1.0	3.0	4.0	1.5	3.0	1.0
<i>Helianthus</i> -type (sunflower)			0.5	0.5		
Cruciferae (mustard family)	0.5	2.0	1.0	2.0	0.5	0.5
Cyperaceae (sedge family)			0.5		1.0	
<i>Ephedra</i> (mormon tea)	2.0		0.5		0.5	
<i>Eriogonum</i> (buckwheat)						0.5
Graminae (grass family)	4.0	2.5	3.0	0.5	0.5	1.0
Labiatae (mint family)		2.0				
Leguminosae (legume or pea family)			1.0			0.5
<i>Plantago</i> (plantain)						1.0

Pollen Type	Sample Number					
	1	2	3	4	5	6
<i>Polygonum</i> (smartweed)			1.0			1.0
Ranunculaceae (buttercup family)	1.0	1.5	1.5	1.5	5.0	0.5
<i>Rhamnus</i>				0.5		
Rosaceae (rose family)		0.5	1.0	1.0	0.5	3.5
<i>Amelanchier</i> (service berry)					0.5	
<i>Cercocarpus</i> (mountain mahogany)		0.5			0.5	0.5
<i>Prunus</i> (chokecherry)				0.5	0.5	3.5
<i>Sambucus</i> (elderberry)		3.5	0.5	0.5		
Saxifragaceae (saxifrage family)			0.5			
<i>Shepherdia</i> (buffaloberry)						0.5
Solanaceae (tomatoe or potatoe family)				0.5	0.5	
<i>Sphaeralcea</i> (globe mallow)					1.0	1.0
<i>Typha latifolia</i> (cattail)				1.5		
Umbelliferae (carrot or parsley family)		1.0		0.5		
Indeterminate	1.0					

A cross-polar microscope was employed in the identification of fibers from the various textiles associated with the burial, and also of the animal hair found with the burial. Fibers were removed from all textiles and examined with the cross-polar microscope. All of the fabrics were woven of either cotton or wool, and will be discussed by textile below. Identification of the dyes used to produce the red, blue, and green wools used in the Navajo textile was undertaken. The red wool has been dyed with cochineal (type of insect most frequently obtained from Mexico). The blue dye is an Indigo dye, which is imported as dry chunks from Mexico (Kent, 1961). The green stripe of the Navajo textile was also a product of cochineal dye, and was identified by Dr. Joe Ben Wheat of the University of Colorado Museum.

Hair remaining on a large piece of tanned leather was identified as buffalo (*Bison bison*) hair through comparison of reference specimens on the cross-polar microscope. What appeared to be matted hair adhering to a coarsely-woven wool textile was also examined with the cross-polar microscope, and determined to be horse.

INDIVIDUAL ARTIFACT DESCRIPTIONS

CLAY PIPE

The pipe (Figure 39) is a reed stemmed variety of a clay smoking pipe. It appears to have a tan, undecorated, smooth exterior; however, the exterior is very eroded due to exposure to the elements. The interior of the bowl is still fire-blackened from use. The pipe is 1½ inches high with a flat rim and is 5/8 inch across the top of the bowl. The bore is 3/16 inch in diameter where it exits the bowl. The stem is broken with only the bit or point of attachment for the stem partially intact. The bit has a raised rim around the end.



Figure 39 — Reed-Stemmed Clay Smoking Pipe

Reed stem pipes were commonly manufactured from about 1840 to 1900 (Lenik, 1970). Stylistically, this pipe nearly duplicates pipes manufactured by a pottery near Mount Pleasant, Ohio. This pottery operated from 1838 to at least 1880 and possibly 1890. Pipes were manufactured at this pottery from at least 1850 to 1880 (Thomas and Burnett, 1971; Sudbury, 1979).

AXE

The axe (Figure 40) is a single bit felling axe of the Ohio style (Hull 1981: 158-165). The head is heavily oxidized, but there are no apparent manufacturer's marks. The poll is peened over where it meets the head, indicating a hammering or pounding use for which the axe was not designed.

The head is iron, 5 $\frac{3}{4}$ inches long and 3 inches high at the eye and 7/8 inch across the eye. The eye is elliptical in shape and is 2 inches long and 5/8 inch wide. The poll is 3 inches long and appears to have been 3/4 inch across, although peening has distorted accurate measurement.

A portion of a hickory handle or helve is also present. It is straight and the segment is 11 inches long. The foot of the handle has been rounded by cutting and scraping. The upper end of the helve is extremely eroded and incomplete. It appears the axe is a standard felling axe manufactured from the early nineteenth century (1820s) until today (Russell, 1967: 262-263). The helve appears to be a cut down version of a standard length by suggesting the tool may have been used as a belt axe.

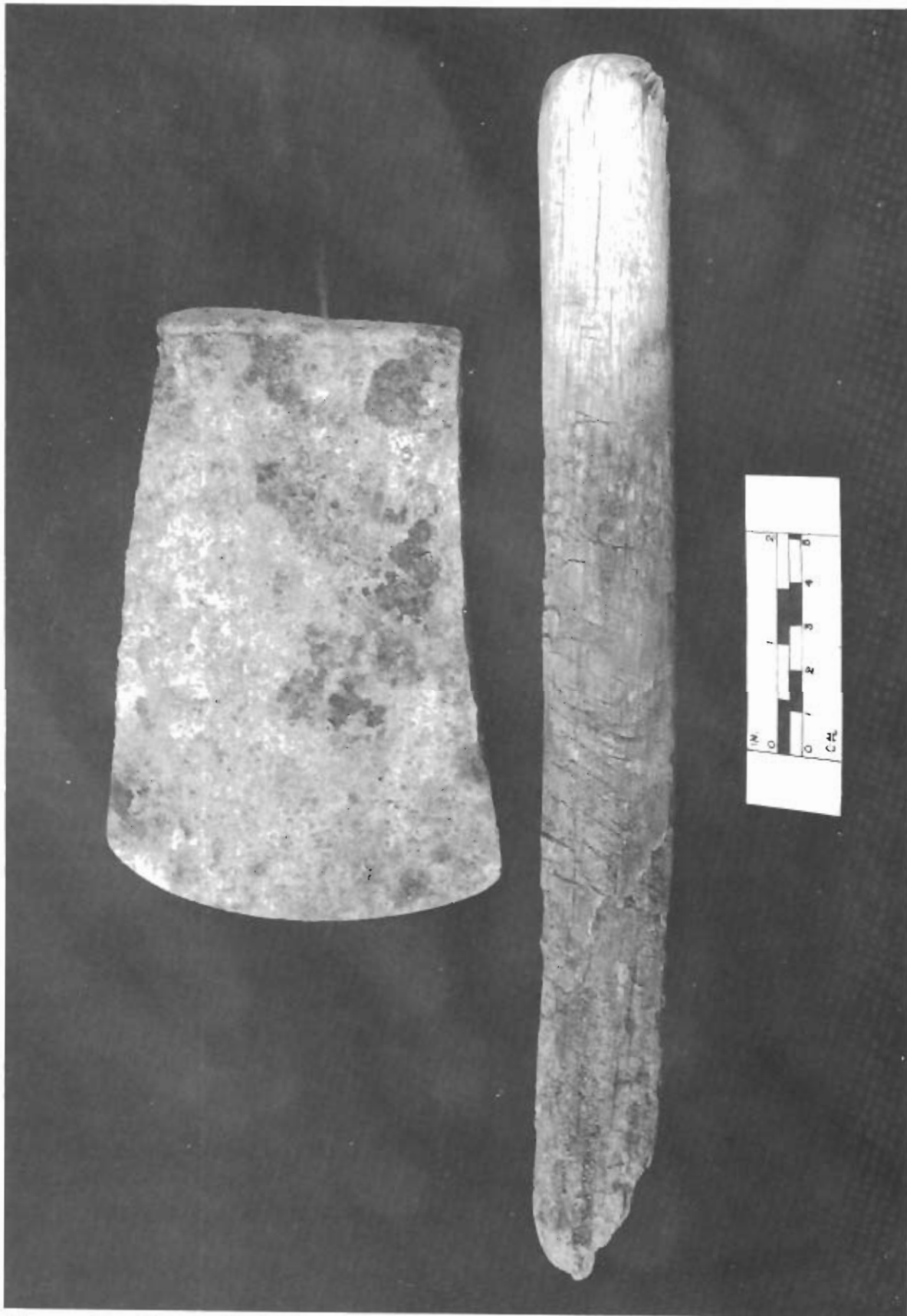


Figure 40 — Single Bit Felling Axe With Shortened Helve

BRASS TACKS

Three brass tack heads with shank fragments are present in the collection. The heads of the tacks are 3/8 inch in diameter and are concave where the square shank attaches to the head. None of the shanks are intact.

CUT NAILS

One complete cut nail and a fragment of the shank of a second nail of approximately the same size are represented in the collection. The nails are both 2d common, but both have a clipped point. The head on the complete nail is machine made, and the nail is typical of totally machine made nails manufactured after 1830 (Nelson, 1968).

CLAY MARBLE

The tan or brown clay marble is 3/4 inch in diameter and is somewhat eroded on its surface. Commercially made clay marbles are generally considered products of the last half of the nineteenth century. However, commercially made specimens are known from sites dating to the 1750s (Richard Polhemus, personal communication, January 8, 1983). Clay marbles were apparently manufactured until about 1920 (Randall, 1971).

HAIR PLATE

The miniature hair plate (Figure 41) is made up of 5 brass buttons or small conchas 9/16 inch in diameter strung on a leather thong with a decorative brass crescent or Naja at the end of the thong. The flat cast crescent is 1½ inches in diameter and is open at its lower end. Human hair still adheres to the hair plate and it was found in place on the skull, hanging down the middle of the face. In addition to the strung hair plate, nine other brass buttons were found with the burial. These buttons are manufactured exactly like those of the hair plate, but they are only 1/2 inch in diameter. All of the buttons are stamped brass with a brass wire loop soldered off-center in the hollow back. Each button is 3/16 inch high. It is assumed the nine loose buttons are a part of the hair plate, but this is speculative.

Hanson (1975:92:95) considers hair plates a distinctive Plains trait. He notes that several explorers noted hair plates in use by members of various Plains tribes by 1835. Hanson (1975:92) further states he has seen no examples dating later than 1868. However, photos of the Ute Indians in northeastern Utah taken by John K. Hiller (Figures 42 and 43) of the Powell Expedition (1871-1875) show miniature hair plates similar to this one still in use about 1875. A photo taken by W.H. Jackson at the Old Los Pinos Ute Agency near Gunnison, Colorado in 1874 (Figure 44) shows a Ute male with a miniature hair plate nearly identical to this sample. It is in place, covering the center hair part and hanging down on the forehead. (Photographs are courtesy of the National Anthropological Archives, Smithsonian Institution.)

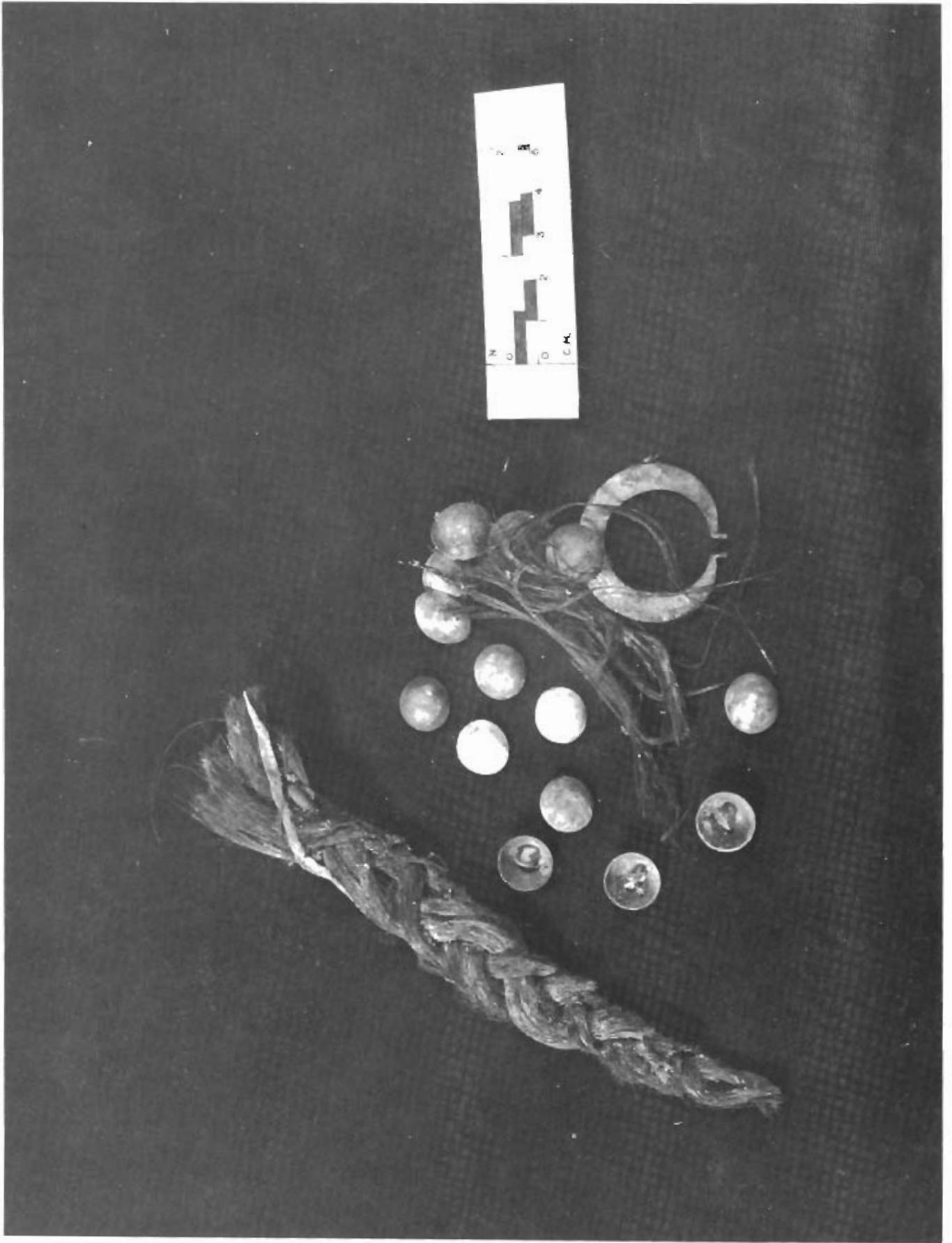


Figure 41 — Miniature Brass Hair Plate and Human Hair Braid

HAIR THONG

One braid of black human hair (Figure 41) has a 4 inch fragment of a leather thong wrapped around it. The thong is of unidentified leather and is 1/8 inch wide.

NECKLACE THONG

Most of the large beads (see Sprague, this volume) were originally strung on a 1/16 inch diameter leather thong. Nine fragments of thong are present and total approximately 40 linear inches. Three fragments have a single overhand knot tied in them.



Figure 42 — John K. Hiller, Powell Expedition Photograph 1871-1875

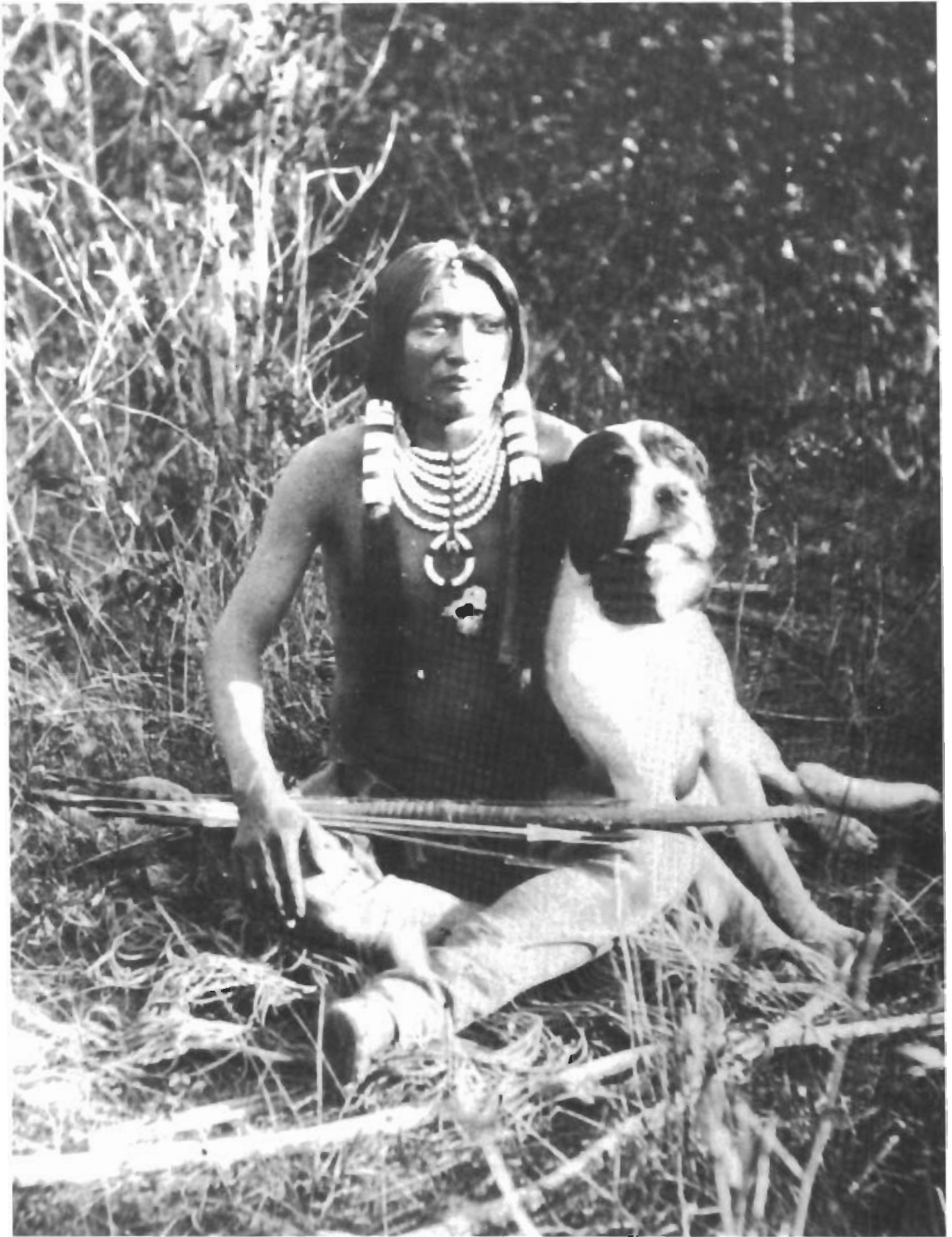


Figure 43 — John K. Hiller, Powell Expedition Photograph 1871-1875

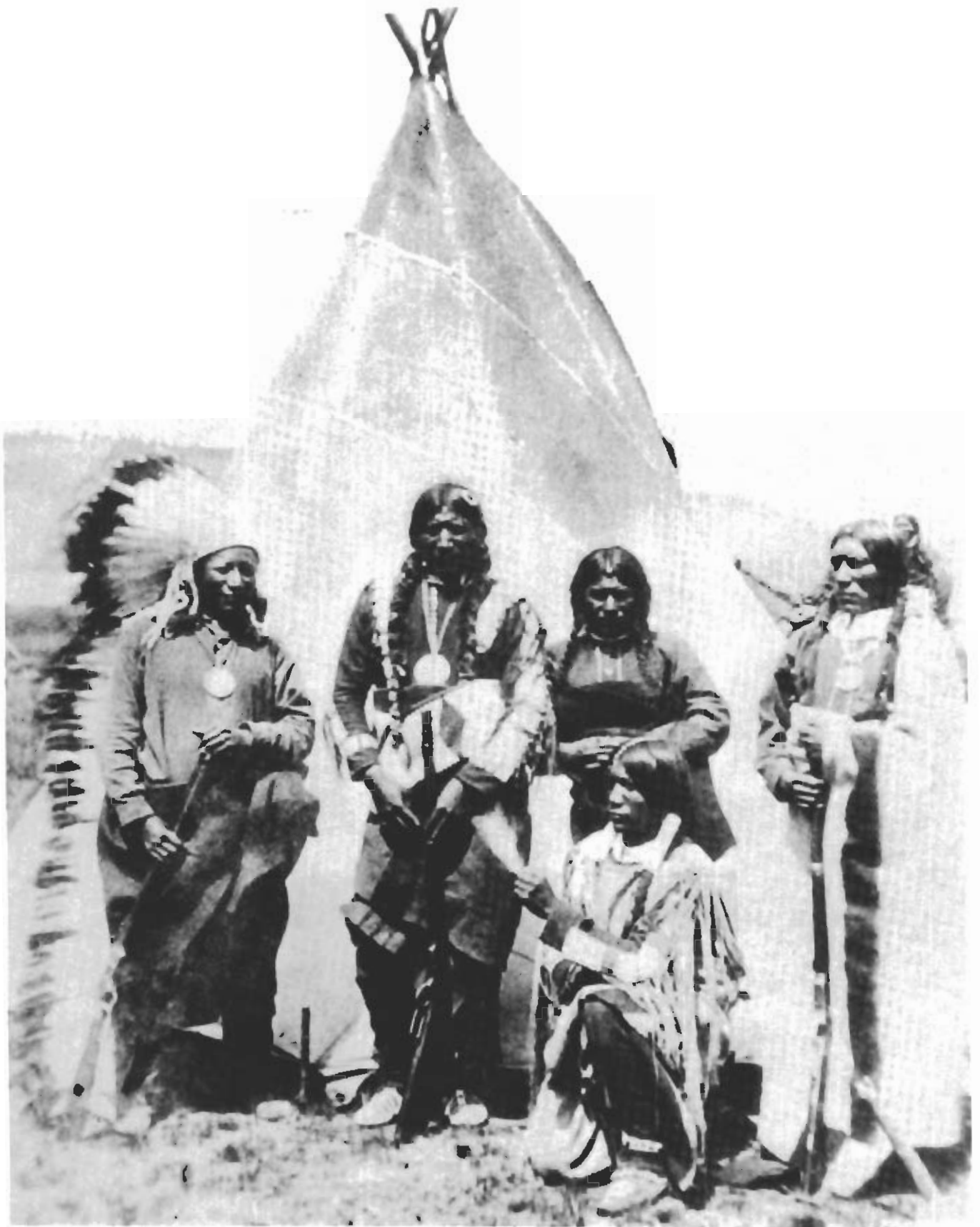


Figure 44 — W. H. Jackson Photograph 1874

HALTER

The halter is commercially made. The heavy leather straps that make up the halter are 1 inch wide and are machine stitched together with heavy white cotton thread or are riveted together with standard 1/8 inch copper rivets. Six, 2 inch iron harness or rigging rings are located on the halter, as well as one, 3 inch iron center bar harness buckle.

HARNESS STRAP

The single harness strap is commercially made leather 1¼ inch wide and approximately 36 inches long. One end is finished and has ten irregularly spaced buckle tongue holes along 18 inches of its length. Three commercially produced buckle tongue holes are located about midway on the strap and are spaced 3 inches apart. The other end of the strap is folded and machine stitched with heavy cotton thread to hold a 2 inch iron D-shaped harness buckle.

HARNESS STRAP FRAGMENTS

One badly desiccated 1¼ inch wide commercially made leather strap consists of the buckle end, which still has a 2 inch by 1 inch rectangular iron buckle, and the tongue end, which is still inserted into the buckle.

There are also four fragments of a 3/16 inch wide commercially manufactured leather strap. One fragment has a 1½ inch center bar harness buckle strung on it.

In the artifact collection there are an additional eight badly desiccated and distorted commercially manufactured fragments of leather that appear to be parts of harness straps.

HARNESS BUCKLE

The iron buckle is a 1¼ inch square roller buckle.

CINCH OR RIGGING RINGS

One cinch or rigging ring is iron and is 3½ inches in diameter. The other two examples are also iron and are 2½ inches in diameter.

LEATHER SADDLE SKIRT

Eleven fragments of a dark, possibly black, leather saddle skirt are in the collec-

tion. The leather is dessicated and very fragile, but at least two pieces retain evidence of a tooled design. The leather is incised and stamped with a leaf design. The leaf is stylized, but could be an oak leaf. The leather appears to be commercially produced, as does the design element. The design has been tooled using metal tools.

BRAIDED RAWHIDE THONG OR REINS

There are five fragments of a four thong round braid (Figure 45). The fragments total about 20 linear inches and are approximately 1/4 inch in diameter. The total length of the fragments, some of which fit together, suggests that the thong may be a rein.

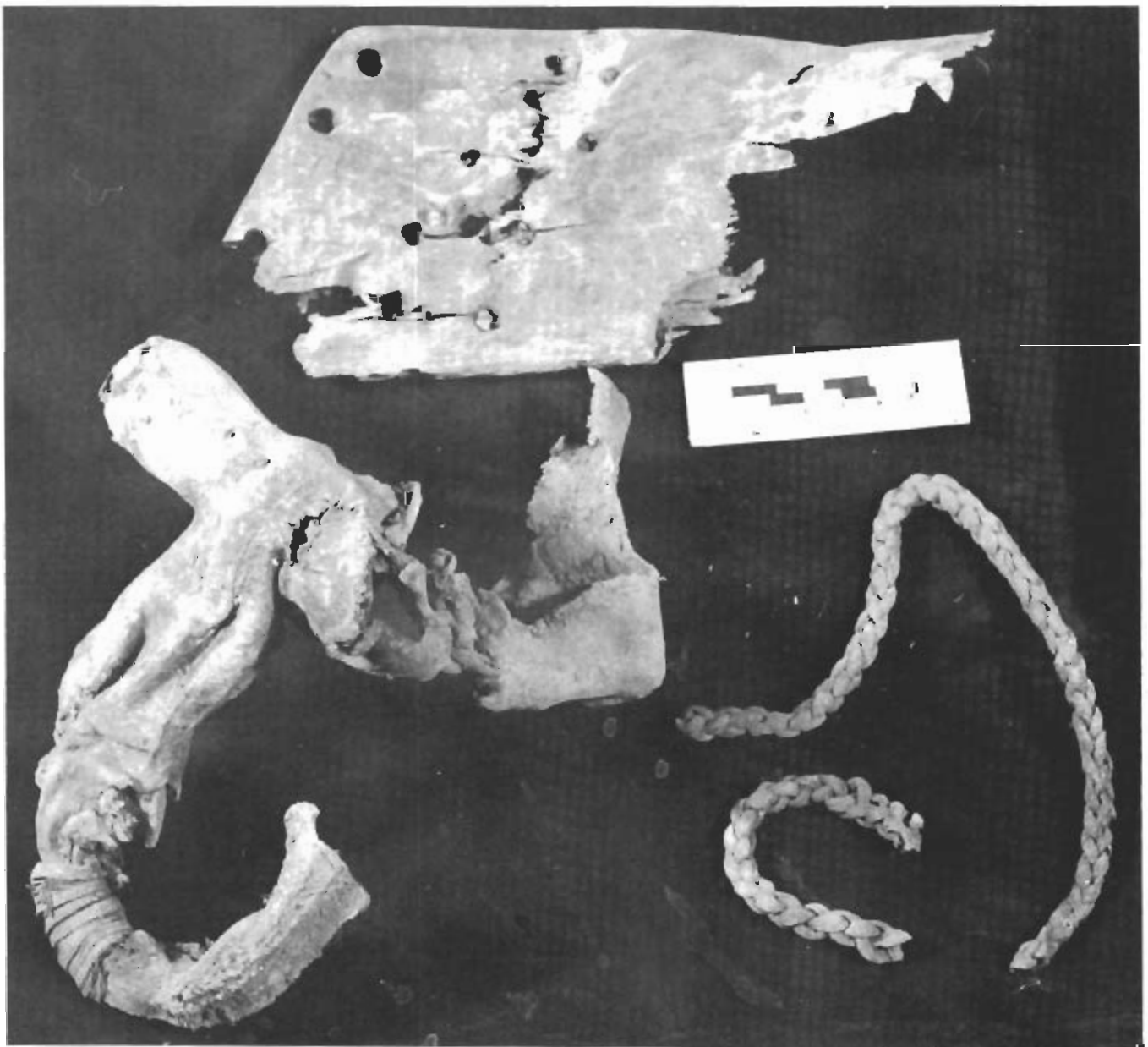


Figure 45 — Upper-Saddletree Fragment. Left—rawhide saddletree covering for the pommel. Right—a rawhide thong or rein.

RAWHIDE SADDLE COVERING

There are seven fragments of a rawhide saddle covering (Figure 45). The largest and most complete section of the covering is the piece that covered the saddle fork. The covering is actually made up of two or three smaller pieces of rawhide stitched together with 1/8 inch rawhide thongs. At least one area of the fork (the left brace) had broken and was repaired by wrapping a rawhide thong for about 1½ inches along the brace. The interior of the fork covering still contains a few fragments of the wooden saddle tree.

SADDLETREE FRAGMENT

The saddletree fragment (Figure 45) is from the sideboard of a native made saddle. The wood is *Populus* sp. (probably aspen). There are ten lacing holes present on the fragment, most of which are elliptical and show wear where the leather laces that stitched the rawhide covering to the saddletree rubbed as the saddle was used.

The fragmented nature of the saddle remains (tree, rawhide covering, and saddle skirt) is not unusual. A similar fragmented saddletree was associated with a Ute burial near Gunnison, Colorado. The senior author dated the specimen to 1830-1880. The fragments of the saddletrees show only minor variation in construction between the two saddles. Ute burial practices included the destruction of the saddle and the burial of the fragments with the deceased (Whitter, 1924; Wiegel, 1928).

In construction (Figure 46), this saddle is very similar to a complete Ute saddle and skirt which is located at the Ute Memorial Museum in Montrose, Colorado. The complete saddle is attributed in ownership to Chipeta, wife of Chief Ouray. Chipeta married Ouray in 1859 and died in 1924 (Wiegel, 1928). Stylistically, the saddle is similar to many Great Basin and Great Plains native-made saddles of the nineteenth century (Alhborn, 1980).

RING SPADE BIT

The ring spade bit (Figure 47) is nearly complete. It is iron with a high port, which had a roller, now missing. It also has a short shank and a ring for control of the animal. The bit has rein chains, which when present, allow for better rider control.

The ring is attached to the bit by a decorative iron device with a series of iron bangles hanging from it. The decorative device probably also served a functional role as it added weight to the ring and helped keep the ring in place. The ring spade bit, although not common, is still used to control horses, and is considered to be very severe or hard on a horse. On either side of the rein chain rings is a single decorative element with bangles that are miniature copies of the decorative ring device. These small decorative elements serve no apparent utilitarian purpose.

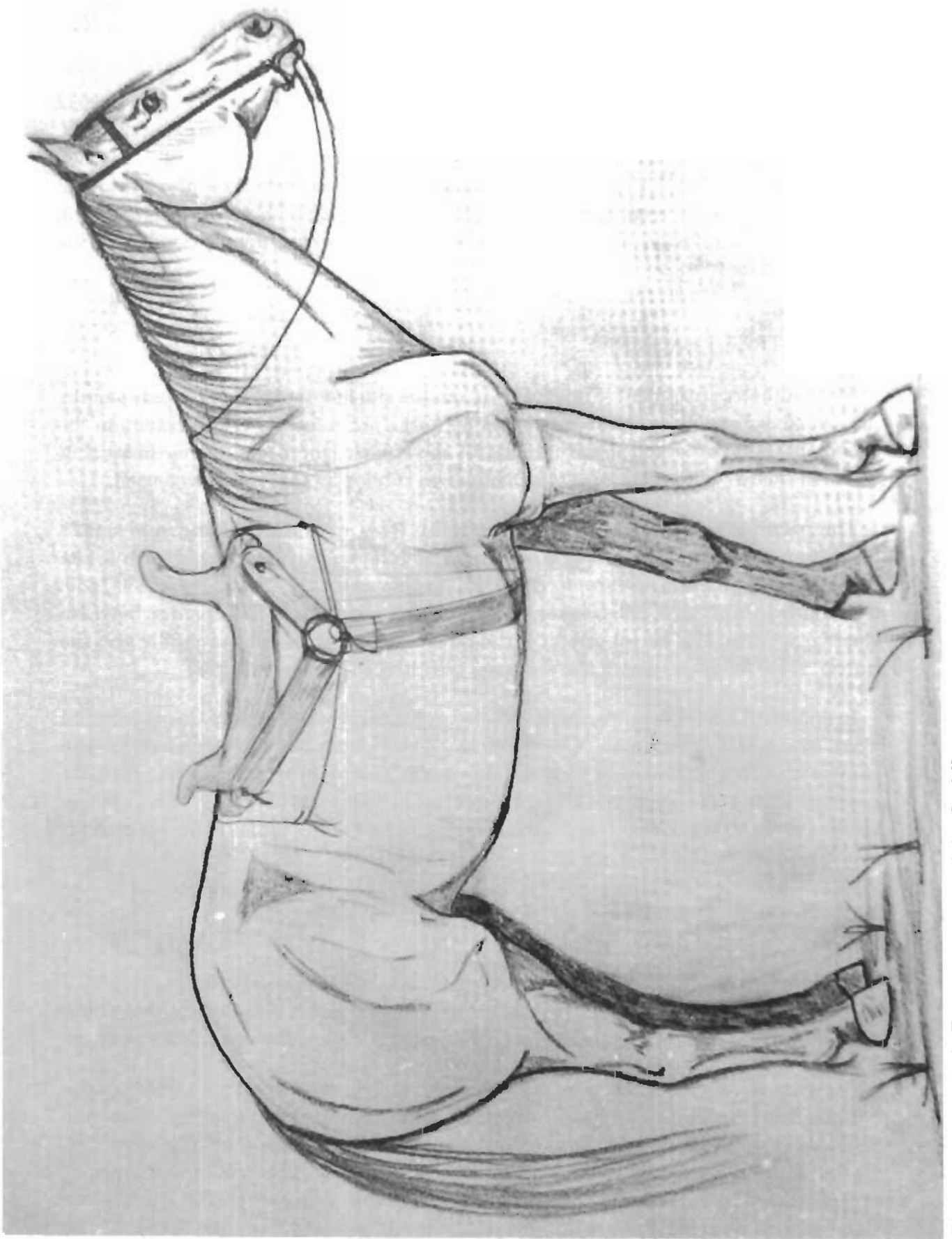


Figure 46 — Artist's Reconstruction of the Saddle

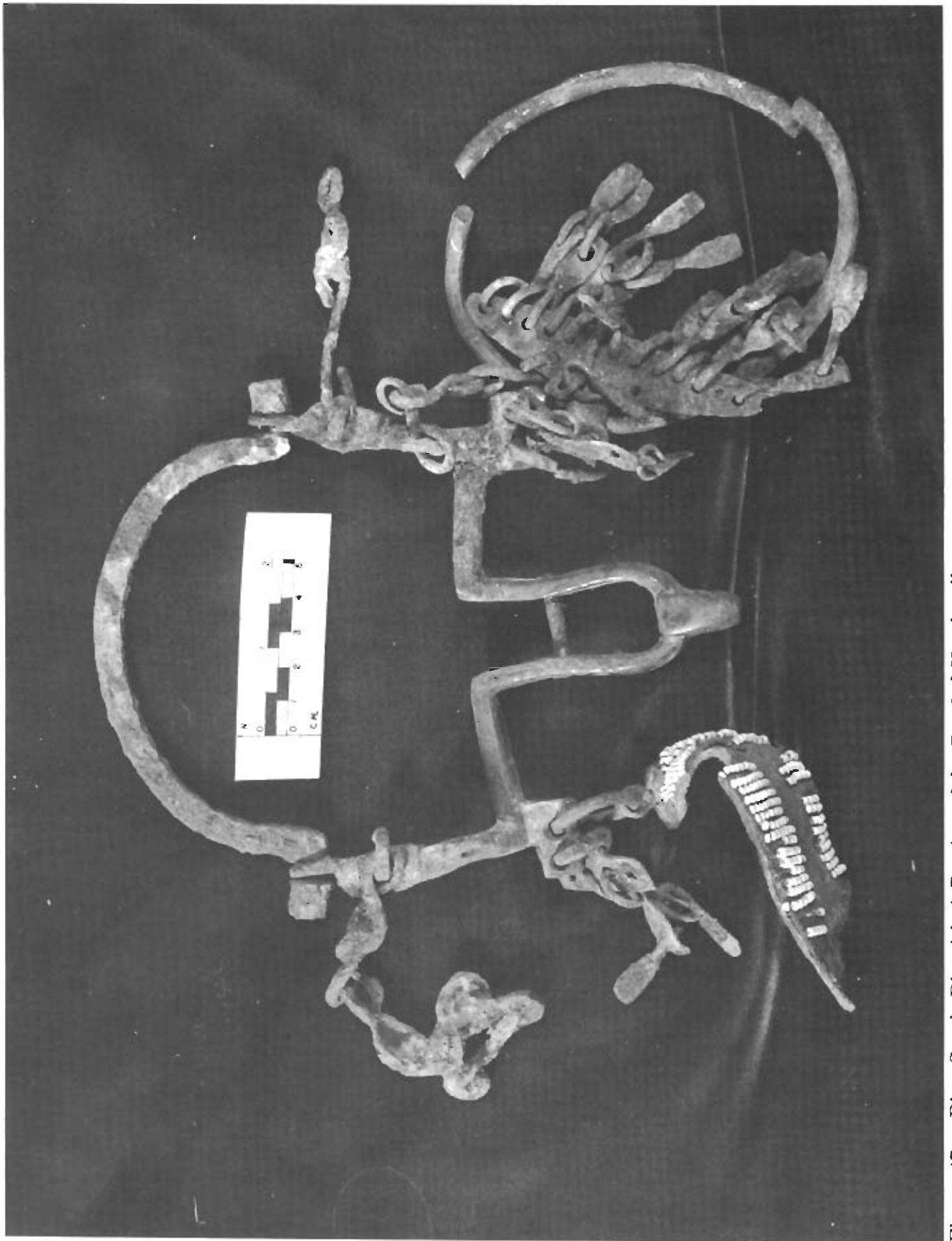


Figure 47 — Ring Spade Bit with A Portion of the Beaded Headstall

The entire bit is reminiscent of a commercially made Spanish-style bit of the 19th century. The bit appears to have been in working order when placed with the burial, and appears to have no repairs or additions, except for a native beaded headstall (Figure 48).

Attached to one headstall ring is a fragment of leather and beaded fabric. This beaded fabric and leather may be a part of the headstall. The tanned leather is about 4 inches long, with two finished edges. It is attached to the bit by a leather thong, which has been split and knotted with a simple overhand knot. The leather is covered with a red napped wool and has been beaded in two columns with white pony beads. Each column contains several rows of eight pony beads stitched on with sinew with a lazy stitch. The columns of beads are about 1/2 inch apart.

Two similarly constructed but unattached fragments may be portions of the browband. They are somewhat distorted due to dessication, but measure 2½ inches wide where they would have connected with the headstall. A knotted leather thong is still in place on the wide end of the leather. The white beaded columns are 1½ inches between the columns where they reach the end. One fragment of the possible browband has five rows of transparent aqua-marine pony beads located in one column. These rows of aquamarine pony beads appear in the column of beads on one side of the leather as follows: two rows of aquamarine beads, two rows of white beads, one row of aquamarine beads, two rows of white beads, and two rows of aquamarine beads. The column of beads on the opposite side of the leather is missing, so it is impossible to determine if the pattern was continued or not.

The red napped wool is nearly gone from one fragment of the possible browband. Near the end where the wool is completely gone the leather is painted with a green, red, green verticle stripe design. The paints are faded, but the painted design runs perpendicular to the beaded columns, which run the length of the browband. The green elements are 1/4 inch wide and are separated by a 1/2 inch wide red painted line. The state of preservation is such that it is difficult to determine if the painted element was a part of the design or if the browband was made from a piece of painted salvaged leather. The painted elements continue under the bead work and may argue for the construction of the browband from salvaged leather.

BUFFALO ROBE

Several large fragments of a decayed and disintegrating tanned leather hide (Figure 49) were found under the upper portion of the burial. The fragments total about 500 square inches of tanned leather and are comprised of at least two pieces sewn together with sinew. The remaining segment of stitching is about 12 inches long and is sewn in an overcast manner. Portions of both segments still have coarse, curly, and what appears to be a brown hair adhering to the leather. The hair was identified using a cross-polar microscope as buffalo.

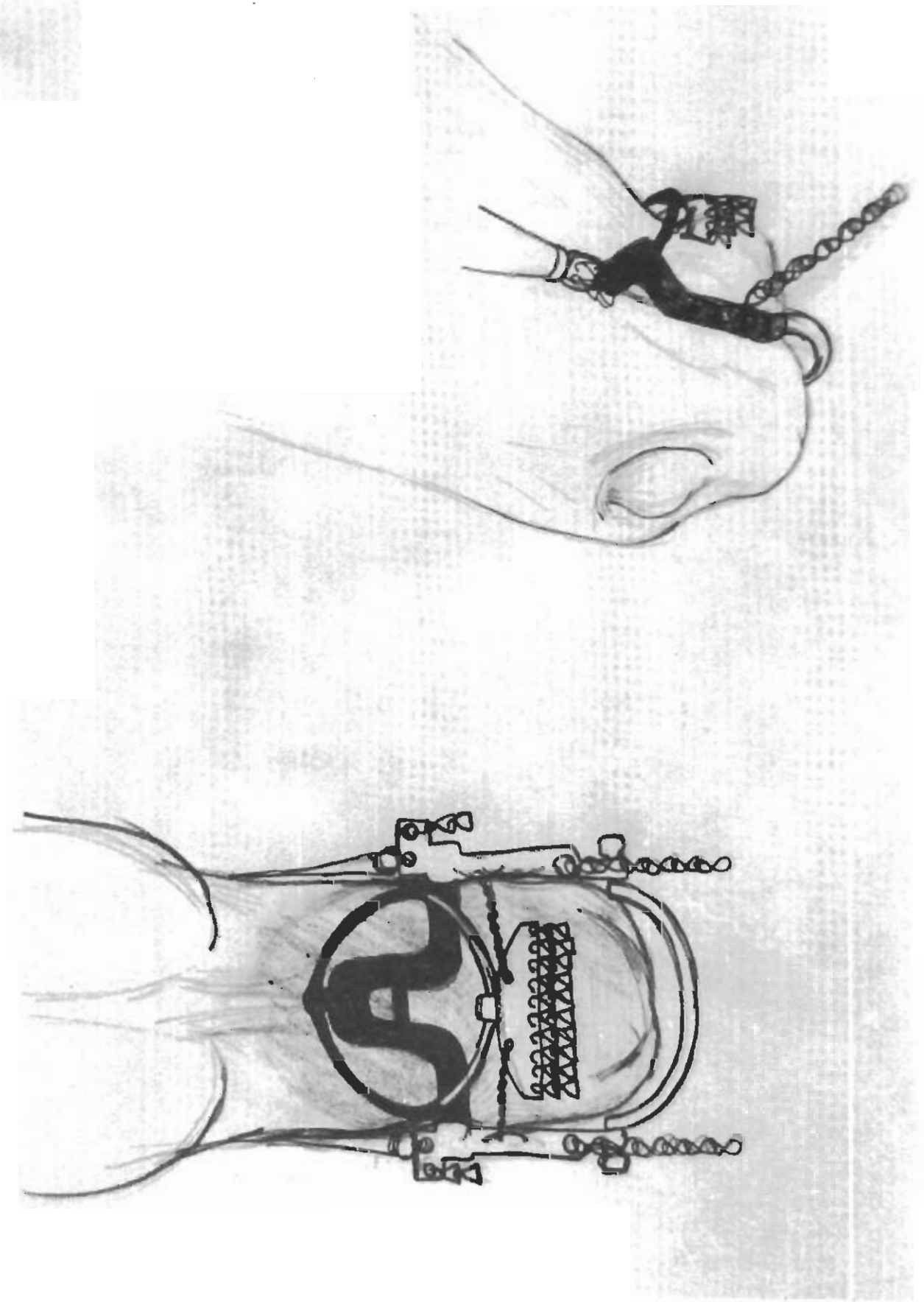


Figure 48 — Artist's Reconstruction of the Ring Spade Bit In Use

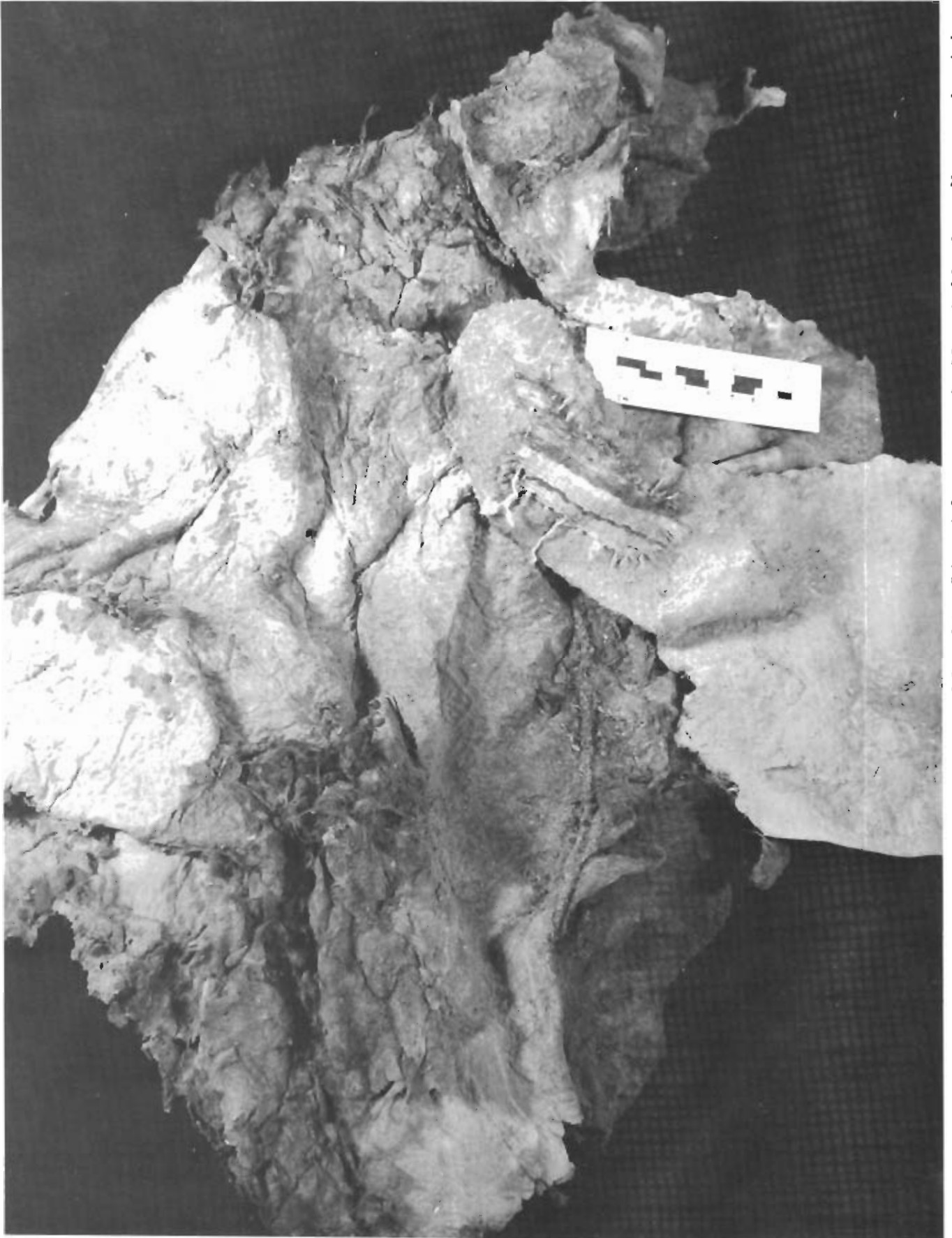


Figure 49 — Fragment of Buffalo Robe Showing Hair and Stitching Line. A fragment of a Navajo blanket adheres to the right side of the fragment.

One piece of the leather has a red or vermillion paint stripe $1\frac{1}{4}$ inch wide and approximately 6 inches long. Both ends of the painted stripe have decayed away. The tanned buffalo leather is interpreted to be the remains of a buffalo robe which had some hair remaining and at least one painted area. The use of buffalo robes in Ute burials was noted by the Wheeler expedition in central Utah in 1872 (Metcalf, 1974).

BEADED VEST

Two fragments of beaded leather (Figure 50) were found in contact with the rib cage of the burial. The fragments, totaling approximately 36 square inches are almost completely beaded with the leather backing having alternating columns of blue and white beads sewn to it. The seed beads are attached in rows of 15-17 beads by a lazy stitch of sinew. The leather has no finished edges. The location of the fragments on the burial and the construction of the piece suggests that it may have been a beaded vest.

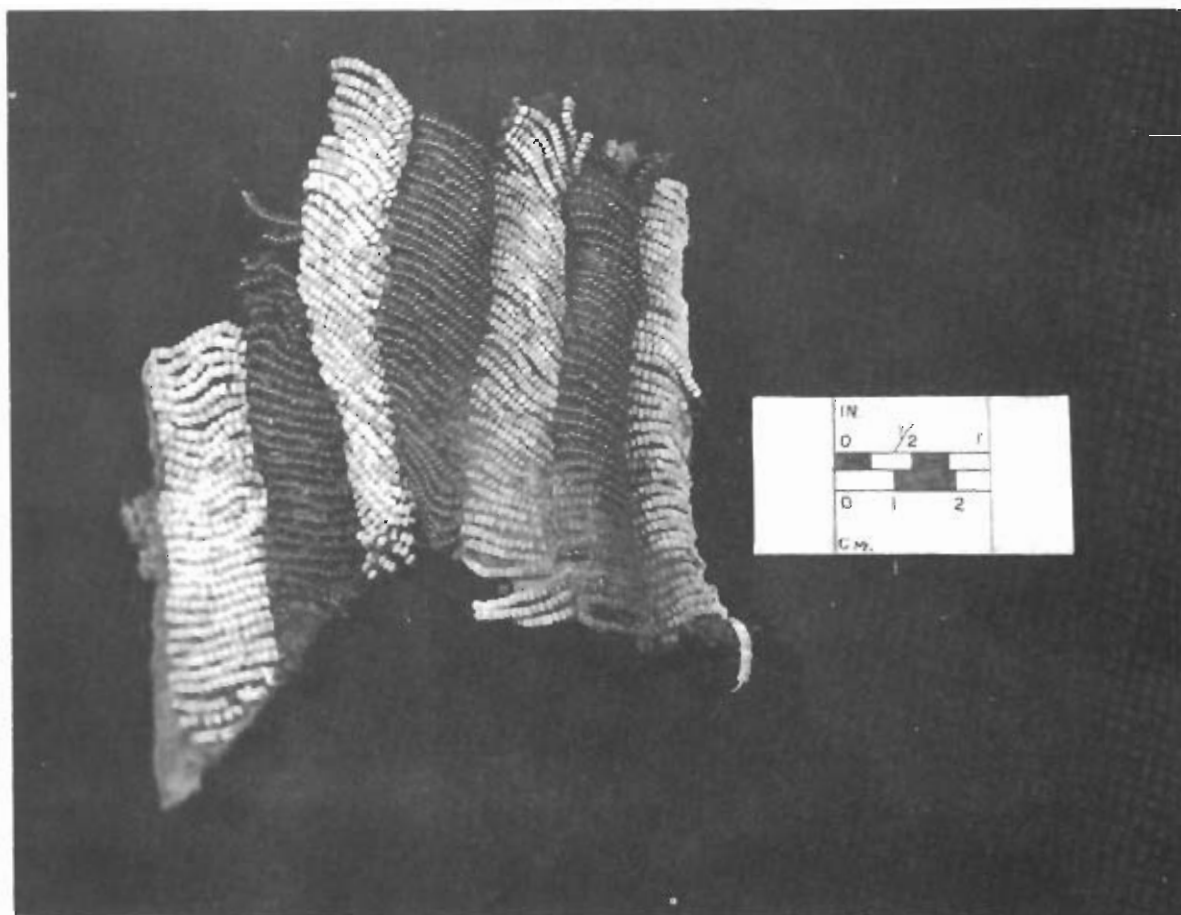


Figure 50 -- Fragment of a Blue and White Beaded Vest

BEADED LEGGINGS

A large folded and beaded piece of leather (Figure 51) is approximately 240 square inches in size and was found under the shoulder of the burial. The composite specimen is constructed of at least two pieces of tanned leather which were sewn together by an overhand stitch with cotton thread. The leather is approximately 15½ inches wide and at least 18 inches long. The upper end of the piece is the sewn segment, which is 3½ inches wide. The lower end of the piece is badly decayed, making other measurements suspect. Sewn to the leather across the top and along each side is a 3½ inch wide strip of red napped wool. Each edge of the wool is bound and sewn to the leather backing by a 1/4 inch wide leather strip. The strip is stitched to the wool and the backing by running stitches of cotton thread.

Sewn to the wool are columns and curvilinear designs of seed beads. There are vertical and diagonal columns of robins egg blue, white, and black seed beads (see Figure 51 for design motif). The curvilinear or floral design is made up of white, black, and translucent green seed beads. A detached fragment of the piece, which probably came from the extremely decayed side, also has a curvilinear design, but it does not duplicate the first one. It contains both white and black vertical columns of beads and a curvilinear design that has white, pink, and robins egg blue beads incorporated into it.

The piece is lined with a blue cotton denim fabric with at least one selvage edge present. The denim appears to have been sewn to the leather by cotton thread which has now mostly disintegrated. About 6 inches down from the top of the piece, the denim has a patched round hole about 1¾ inches in diameter. The hole appears to have resulted from wear. The patch is a darker shade of blue denim and is sewn over the hole with a combination of overcast and running stitches with cotton thread. The denim and patch are very reminiscent of a repair of modern faded and worn bluejeans. This similarity does not imply that the lining, in fact, represents a pair of manufactured bluejeans.

The overall configuration of the beaded piece suggests that it may have been a part of a legging. The decayed state of the item prevents positive identification, but it very closely resembles leggings seen in historic photographs.

COTTON PRINT FABRIC

Two sizable fragments comprising approximately 184 square inches of a cotton print fabric (Figure 52, Table 4) are present in the collection and were found covering the cotton shirt. Selvage finish is present on one edge of the fabric. The cotton is tightly woven, probably on a commercial power loom and the print runs vertically in columns (Figure 52). Although the fabric is stained and faded, the original colors appear to be black, beige or white, and brown. No sewn seams are present on the remnant fabric, so it is not possible to determine what function that fabric served.

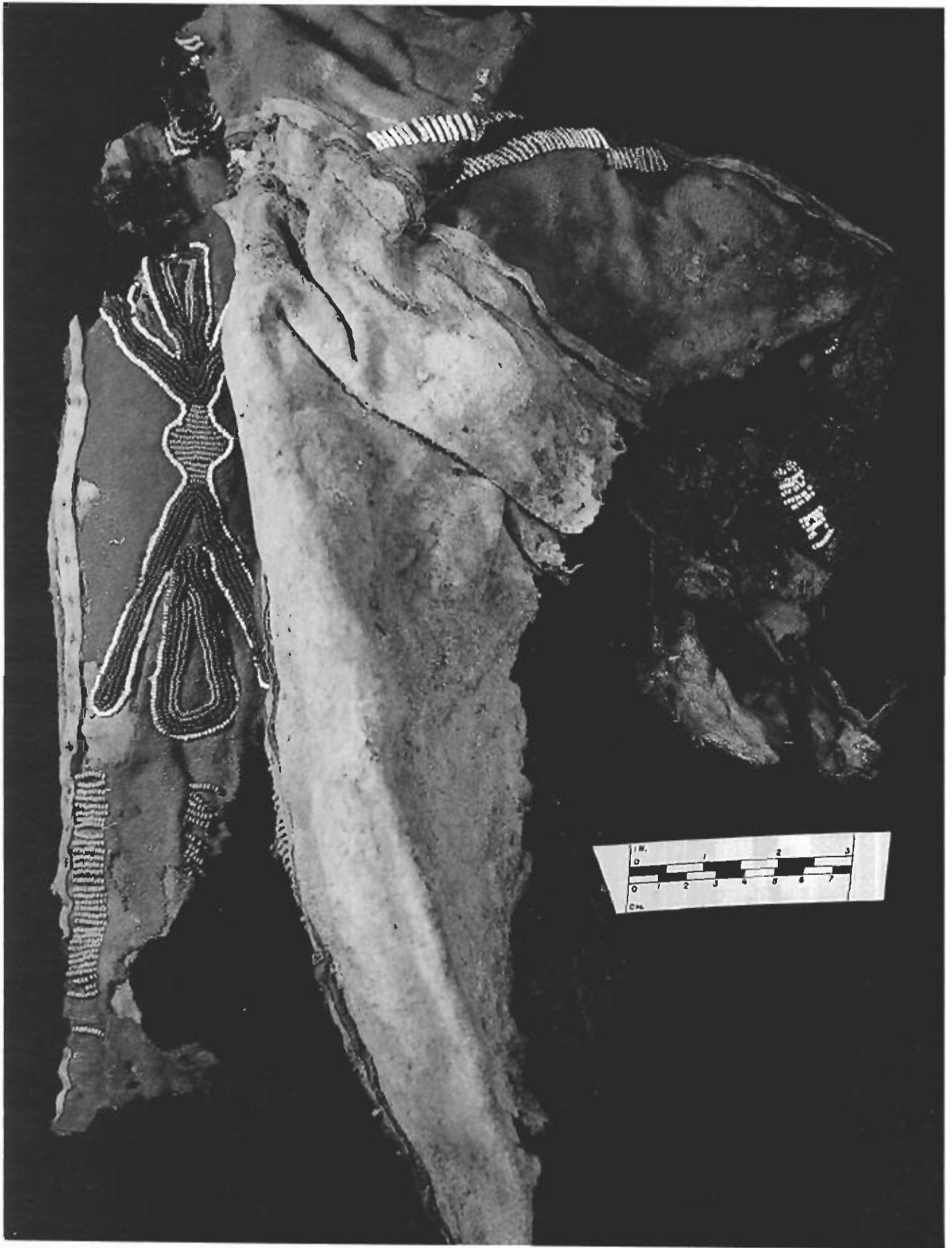


Figure 51 — Beaded Leather Legging

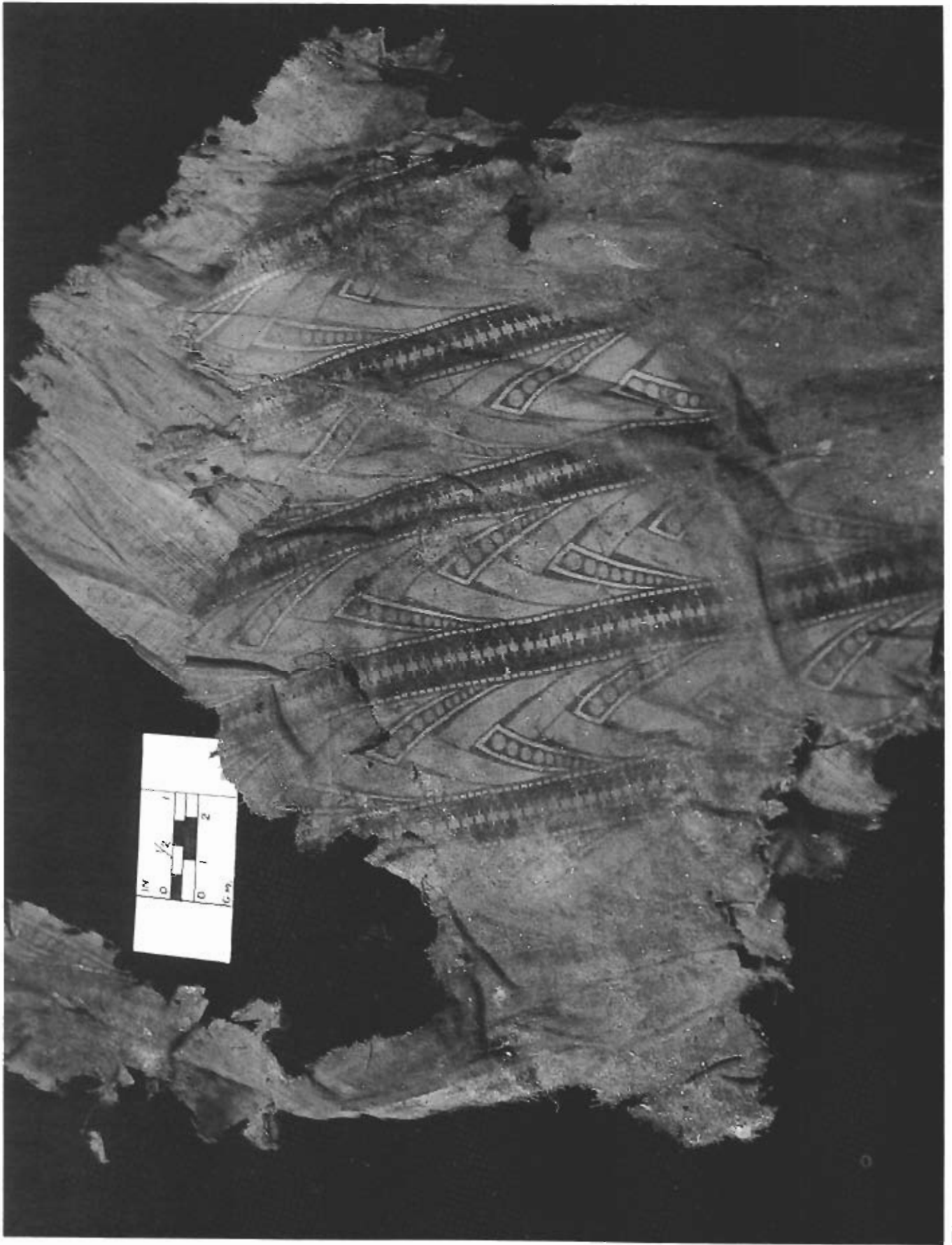


Figure 52 — Cotton Print Fabric

TABLE 4
SUMMARY OF TEXTILES

Textile	Square Inches Remaining	Function or Comments
Cotton print fabric	184	Possible shirt
Cotton striped shirt	500+	Mid-nineteenth century style work shirt
Blue cotton denim	200+	Lining of possible legging
Tight weave green cotton	13	Unknown
Rubberized cotton (canvas)	10	Possible rubberized poncho or tarp
White cotton canvas	3	Unknown
Cotton/wool with green and gold stripes or plaid	56	Blanket or shirt
Red napped beaded wool	240	Possible legging
Coarse white wool	124	Horse hair on the item suggests use as a saddle blanket
Brown/White coarse wool	20	Possible saddle pad
Fine weave white wool	61	Unknown
Brown wool with black stripe	16	Possible blanket
Navajo textile	15	Possibly a blanket in the Classic style

Printing designs on cotton fabric became possible on a commercial basis in 1838 with the patent of a printing machine. By the 1870s printed fabrics were very common throughout the United States and numerous printing mills were scattered about the eastern and mid-western United States (Kidwell and Christman, 1974:69-75).

COTTON SHIRT

The cotton shirt (Figure 53) is a coarse weave of blue and white or beige narrow vertical stripes. The shirt is a pullover style of work shirt with a placard opening and

short stand-up collar. The shirt is completely machine sewn, which may suggest it was a ready-made product. The shirt was found in place on the upper torso of the body. Evidently the individual was wearing the shirt at the time of burial.

The collar is 2½ inches high and has a button hole on either side at the front. There are two button holes on the placard-style opening, which extends down 12½ inches from the collar. A portion of one cuff is present on the right sleeve. The cuff is 2 inches deep and has one white glass button still in place buttoning the cuff closed. The button is a common 4-hole variety, 5/8 inch in diameter, white glass button.

The style of the shirt can be described as a drop-sleeve placard front work shirt. Machine sewn clothing did not become possible until 1842 with the patent of the sewing machine (Kidwell and Christman, 1974:75). This particular shirt style with the placard front and short stand-up collar did not become popular until around 1850. They lost popularity and were out of style by about 1875 (Gorsline, 1957:208-233).

NAVAJO TEXTILE

About 15 square inches of a wool textile (Figure 54) were found with the burial. Three fragments were loose, one was found adhering to the buffalo robe, and a final fragment was sandwiched between folded pieces of another wool textile.

The textile is constructed entirely of wool with an average of 35 threads to the inch. The warp is a single-ply white undyed wool. The wefts are woven bands or stripes in varying widths of white natural wool, gray natural wool, pink or pinkish-tan (which now appears as a medium brown) commercially dyed and twisted wool, red commercially dyed wool, blue commercially dyed wool, and green commercially dyed wool. All wefts are three-ply. All of the stripes are relatively narrow ranging from 1/16 inch for the blue stripe to 1½ inch for the gray stripe. The rhythm or pattern of the blanket is . . . gray, white, red border, pink, red border, white gray, pink, white, gray, white. . . With the exception of what appears to have been the center motif (between the red borders), colored stripes are alternated with white stripes. The narrow green stripe occurs as one of these alternating stripes on a small fragment, but not on the larger fragment. The white and gray stripes are undyed wool. The red stripes are cochineal-dyed, 3-ply, z-spun yarn that has been raveled and retwisted. This is a commercially made yarn commonly called bayeta. The blue stripes are an indigo-dyed, commercial 3-ply yarn, which has also been raveled and retwisted. The pink yarn is also commercially dyed, although the source of the dye could not be identified. This yarn was the only 3-ply piece to show a definite commercial twist. The green-dyed wool is also a commercially dyed indigo product, and appears to have been raveled and retwisted like the red and blue yarns. A green color is obtained from indigo by short exposure to the dye, or overdyeing with a native yellow dye (Joe Ben Wheat, personal communication, March 11, 1983).



Figure 53 — Striped Cotton Shirt

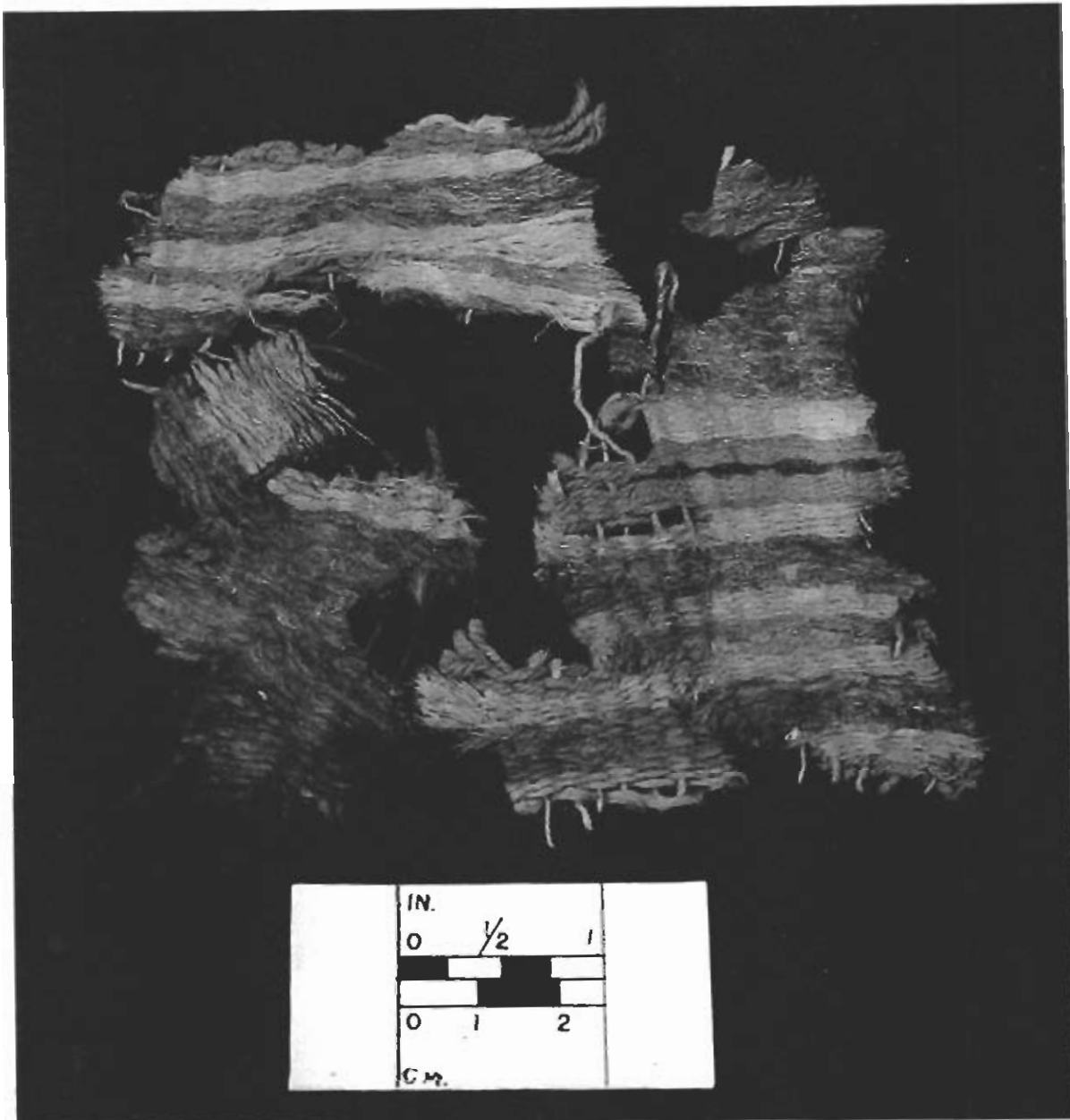


Figure 54 — Fragment of a Navajo Blanket

The textile matches in design, construction, and execution textiles made by the Navajos in the mid-nineteenth century. Although the fragments are small, the textile appears to have been a blanket. The use of bayeta and indigo dyed commercial yarns and the narrow stripe design aid significantly in dating the era of weaving for the piece. The narrow stripes, gray and white natural colors of wool, and the very narrow stripes made of commercial yarns of bayeta and indigo place the period of weaving from before 1850 to about 1875, or during the classic period of Navajo weaving (Amsden, 1934; Kent, 1961; Dedera, 1975). Dr. Joe Ben Wheat of the University of Colorado Museum also examined this piece and states that the textile is a Navajo

blanket of the classic style, manufactured between 1860 and 1875 (personal communication, March 11, 1983).

OTHER TEXTILES

There are eight other textile types represented in the artifact collection, aside from those already described. These textiles are very fragmentary and specific functional identifications are speculative at best. Most of the textiles occur in several fragments and were found in different locations on or near the body during cleaning and exposure. In fact, several of the pieces are sandwiched between others or are adhering to other non-textile artifacts. This is the result of the vagaries of preservation and the folding of items together for placement with the body.

COARSE WHITE WOOL TEXTILE

There are 124 square inches of a coarse woven white (natural) wool. The fragments were found under seven different artifact catalog numbers and one of the seven pieces was found folded behind the possible beaded vest. The weave is very coarse with a one over, one under single ply warp and weft. Portions of the fabric are discolored brown, probably through contact with dirt, leather, and the body. A number of hairs, which have been identified as horse through the use of cross-polar microscopy, were adhering to the fabric, suggesting that it may have been a saddle blanket.

COARSE WOOL BROWN AND WHITE (NATURAL) TEXTILE (Figure 55)

There are approximately 120 square inches of this colored textile. The wool is coarsely woven with the dark brown wool making the weft and a white or natural wool comprising the warp. The coarseness of the weave allows the warp to show through, creating a two-color effect. Neither wool appears to have been dyed. The weight of this textile and the coarse weave are reminiscent of saddle pads manufactured today for horseback riding. This textile was found folded up with the coarse white wool textile described above.

COTTON/WOOL STRIPED OR PLAID TEXTILE

Approximately 56 square inches of a cotton warp, wool weft fabric was also found. The weave, which is one over and one under, is moderately loose with the single-ply natural white cotton used as the warp and a single-ply wool as the weft. There are 1 inch wide stripes of green and gold dyed wool still definable on a portion of the fabric. The state of preservation of the fabric is such that it is not possible to definitively determine if the stripe is actually a plaid or not. Portions of the remnant certainly

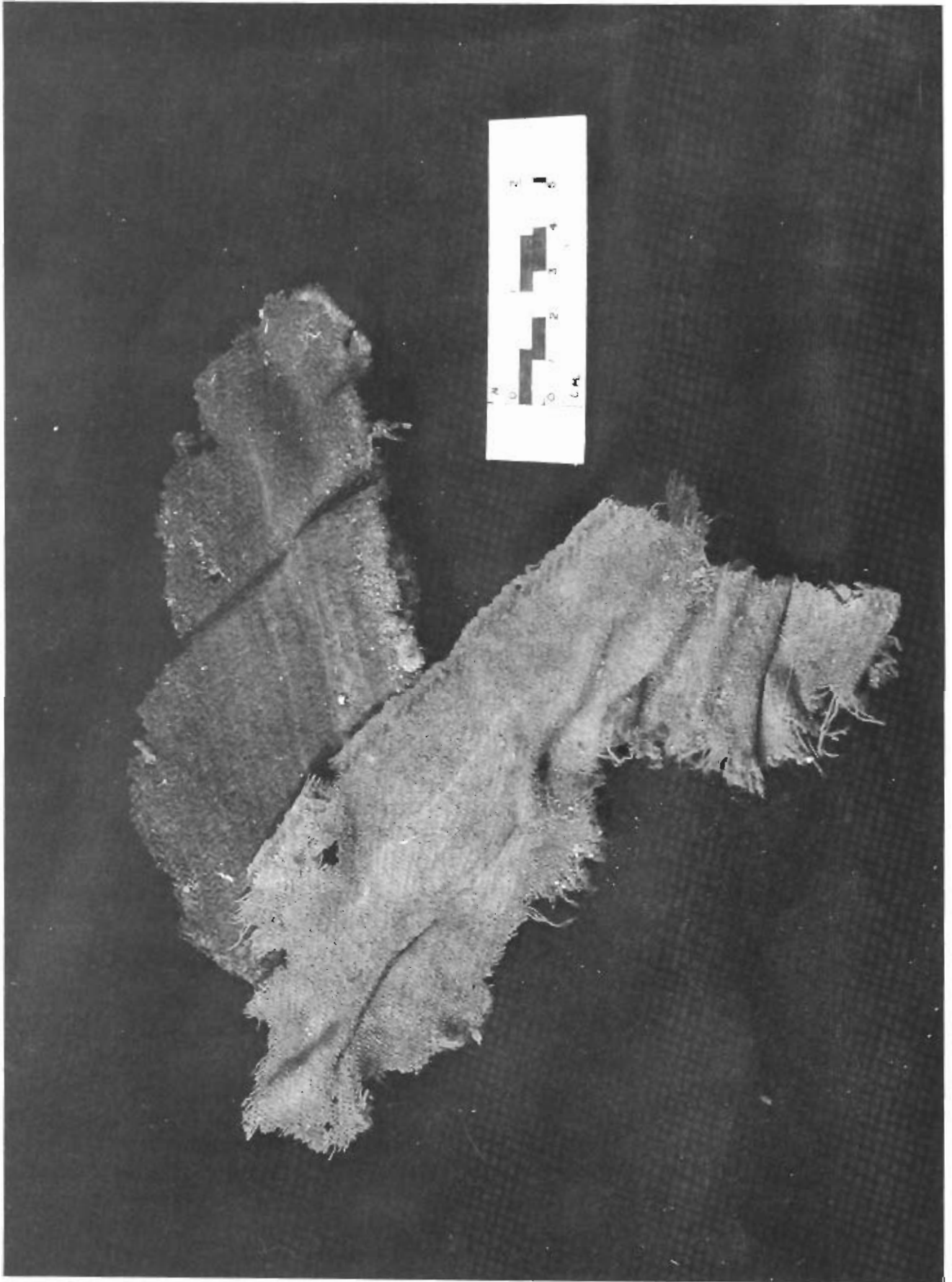


Figure 55 — Upper Fragment — A Coarse Brown and White Wool Textile, which may have been a saddle pad.
Lower fragment — a wool textile with a black striped edge, possibly a blanket.

appear that way. The fabric may have been part of a light blanket or shirt, but not enough remains of this textile to be certain.

FINELY WOVEN WOOL TEXTILE

There are 61 square inches of a fine-woven wool textile from three separate catalog units. The wool is tightly woven and is a natural white color, although some discoloring has occurred due to bleeding and contact with a red dyed fabric.

STRIPED WOOL TEXTILE WITH BLACK EDGE (Figure 55)

This moderately loosely woven wool textile is about 16 square inches and has a selvage edge. A black 1/4 inch wide wool stripe runs parallel to the edge about 1/4 inch from the edge. The original color of the fabric may have been a beige or brown, but is difficult to determine since a red dye from another fabric has bled onto this one. The weave and texture of the fabric suggest it may have been a blanket. It was found folded together with the possible saddle pad.

TIGHTLY WOVEN COTTON TEXTILE (Figure 56)

The 13 square inches of this fabric were found in two separate catalog units. One fragment has the remains of an overcast hand-stitched seam. The cotton warp and weft are tightly woven in a one over, one under manner. The fabric is badly faded, but may have been dyed a light shade of green.

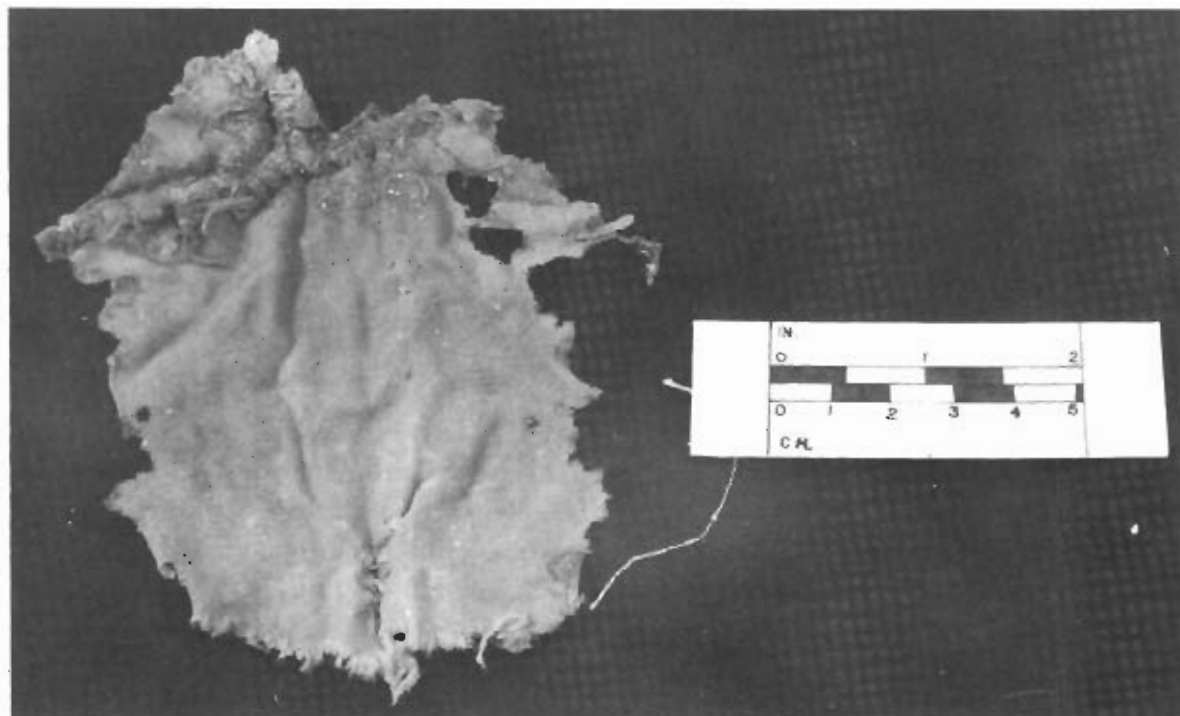


Figure 56 — Tightly Woven Cotton Textile with the Remains of an Overcast Hand-stitched Seam

RUBBERIZED COTTON TEXTILE

There are 10 square inches of a tightly woven canvas. The fragments are woven in a 2 over and 2 under fashion. One side of the fabric had been impregnated with a rubber compound. The fragment nearly duplicates in form and texture the vulcanized (rubberized) muslin based poncho issued to US Army troops in the mid-nineteenth century, and particularly during the Civil War (Todd, 1974:73; Lord, 1965:195-196), or, the textile could be part of a rubberized tarp.

WHITE COTTON TEXTILE

The three square inches of textile from two catalog units are tightly woven 2 over and 2 under undyed cotton canvas.

ARTIFACT SUMMARY

The variety of goods the individual was buried with is amazing, as is the preservation of the artifacts themselves. It is clear that the individual was buried with horse-related trappings (saddle, halter, bit, and possibly at least one saddle blanket), a buffalo robe, beaded leggings, a shirt, a pipe, a marble, a necklace of beads, a beaded vest, an axe, hair plate, Navajo blanket and a variety of fabrics of unidentified form (including at least three different cotton items, one cotton and wool composite and four different wool items). The unidentified items are probably parts of blankets, shirts, and other items of wearing apparel; unfortunately, their deteriorated state prohibits specific identification.

It appears from the notes and photographs of the burial during exposure that the body was wrapped in a buffalo robe when interred. Some of the clothing, fabrics, and blankets were probably placed in the burial robe, while others, like the striped shirt, were on the body at the time of interment. The legging may have been lying under the robe. The individual was also wearing a beaded necklace and possibly the beaded vest. The other items may have been placed on or in the robe rather than having been on the body at the time of burial.

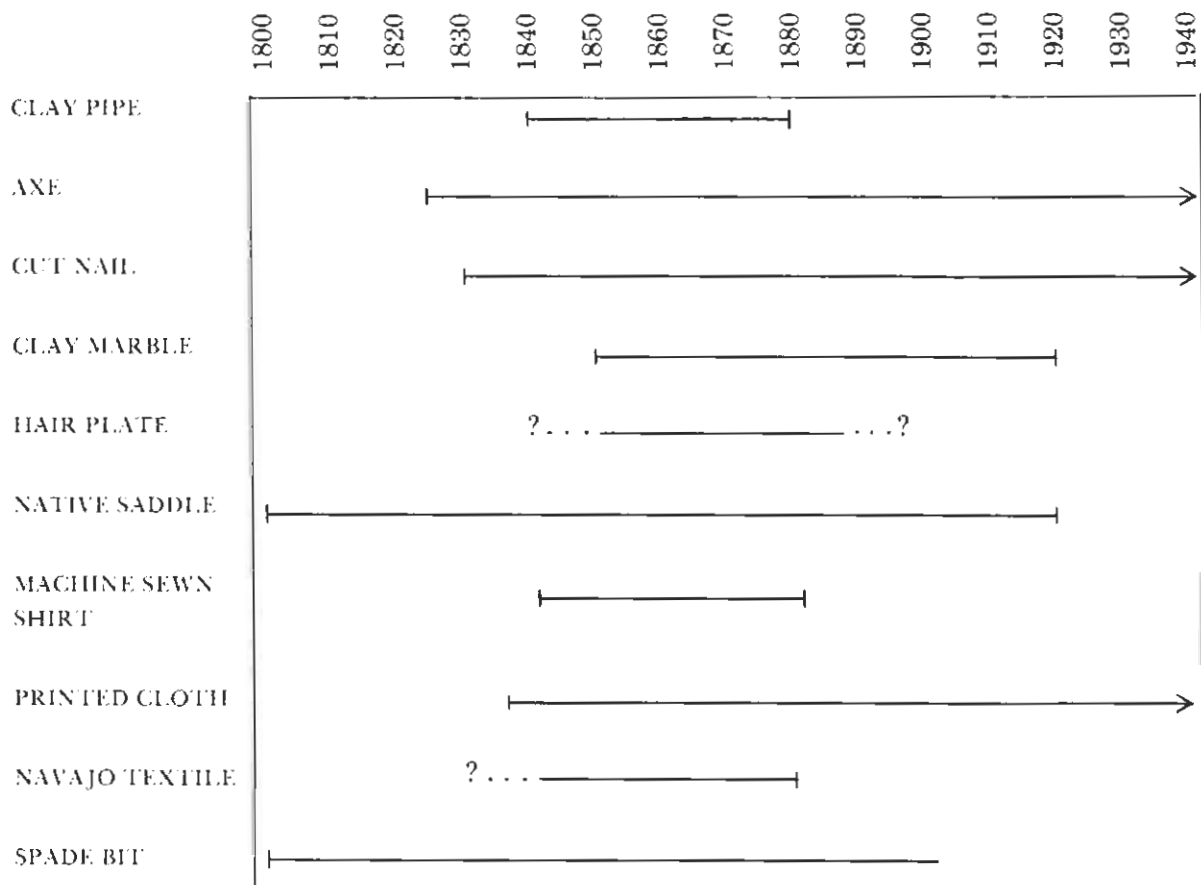
Most of the artifacts, with the exception of the Navajo blanket, some of the tanned leather, the buffalo robe, and beaded articles are of Euro-American manufacture. Several of the items, like the hair plate and beadwork, show specific Indian usage of manufactured goods. The hair plate and beaded vest indicate knowledge of or contact with aboriginal groups of the Great Plains. The beaded legging is stylistically like those of the eastern Plains and upper Northeast Indian groups. This is not atypical of Ute assimilation of ideas, as can be seen in the documented Ute beadwork and personal adornment items from ethnographic contexts (Smith, 1974) and in museums. The Navajo textile also falls in the category of items traded to the Utes. The Utes

were known to be a wide-ranging group with frequent contacts with other aboriginal groups, especially the Navajo (Smith, 1974).

The datable artifacts (Table 5) provide a mid-nineteenth century date range for the burial. The cotton shirt, Navajo textile, and the clay pipe most clearly point to an 1850-1875 date range. While a later date cannot be completely ruled out, a date in the third quarter of the nineteenth century seems to be the most likely for the death and interment of the individual found at 42UN1225.

No data concerning ceremonial use of plants in the interment were obtained through pollen analysis. Techniques of cross-polar microscopy proved valuable, however, in the identification of the fabrics of the various textiles associated with the burial, the identification of at least some of the dyes in the Navajo textile, and the identification of the hair found on two artifacts.

TABLE 5
SELECTED ARTIFACTS AS CHRONOLOGICAL INDICATORS



GLASS TRADE BEADS

by

Roderick Sprague

A sample of beads representing a small portion of the total number recovered was sent to me for analysis and possible estimation of a range of dates. Since this sample was just that, no attempt was made to give the usual metric observations, Munsell color ranges, or other specific attributes in tabular form.

Eleven different types of wound beads were observed. Ten of these are spherical in shape and one is ovoid. The spherical types are opaque black, opaque chalky white, opaque milky white, translucent white, translucent light blue, translucent robins egg blue, transparent clear, transparent dark blue, transparent amber, and Cornaline d'Aleppo transparent red over opaque white (Figure 57). In size they all range from over 6mm to 15mm with bore sizes ranging from under 1mm to slightly over 3mm.

The one ovoid type is opaque chalky white, 10.5 - 11mm in length, 7 - 10mm in diameter, with a bore range of 2 - 3mm. The total number of large or "necklace" beads was apparently 135 of which 29 were analyzed.

The drawn (seed) bead population has been estimated at between 50,000 and 100,000 (Figure 58). A sample of less than 100 seed beads was observed. From the study of slides taken of a larger sample, it is assumed that examples of all colors were contained in the study sample. On the same basis it is suggested that the seed beads were in an approximate ratio of 50% opaque white, 30% transparent blue, 15% opaque light blue, 4% opaque pink and about 1% opaque green. The lengths ranged from 1.0mm to 1.85mm, the diameter from 1.55mm to 1.95mm, and the bore was less than 1mm. The Munsell designations group around the following: white (N 9.5), blue (10B 7/8), light blue (10B 6/8), pink (2.5R 6/8), green (not available).

Because the wound beads are limited largely to white, blue, and robins egg blue and because of their association with small beads, it is suggested that the bead assemblage dates to about 1835 to 1865. Without the plain shapes and colors of the wound beads, the small size of the seed beads might argue for a later date but this size is not unknown in the suggested time period. The most likely source for this assemblage would be Murano; however, the wound beads, especially the transparent types, could be assigned to China. The variety and complexity of the beads do not suggest any distinctive status or role for the associated individual. However, the quantity of seed beads will have to be interpreted by those more familiar with the area.

The editors of this volume note that attempts to count the beads became frugal since literally thousands of seed and some larger beads were scattered about the site, the result of various activities.

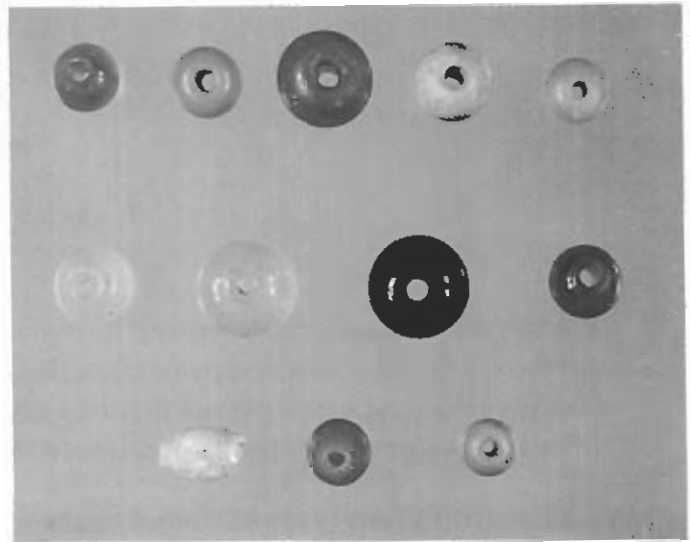
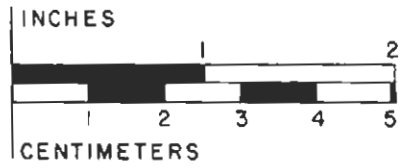


Figure 57 — Ovoid and Spherical Wound Beads

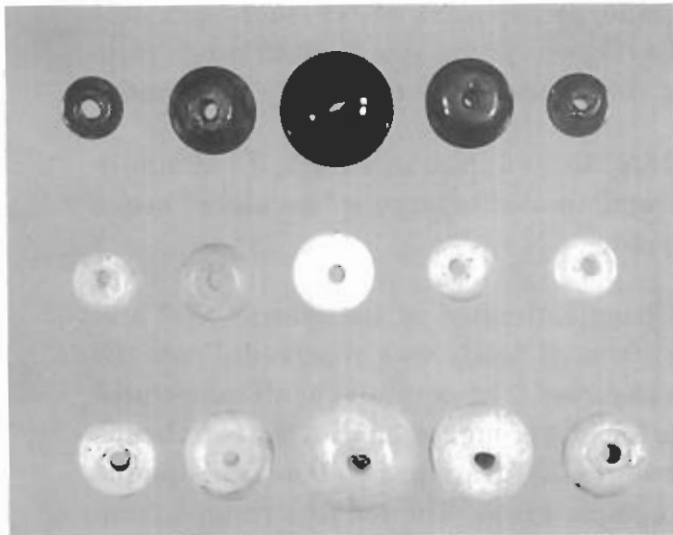
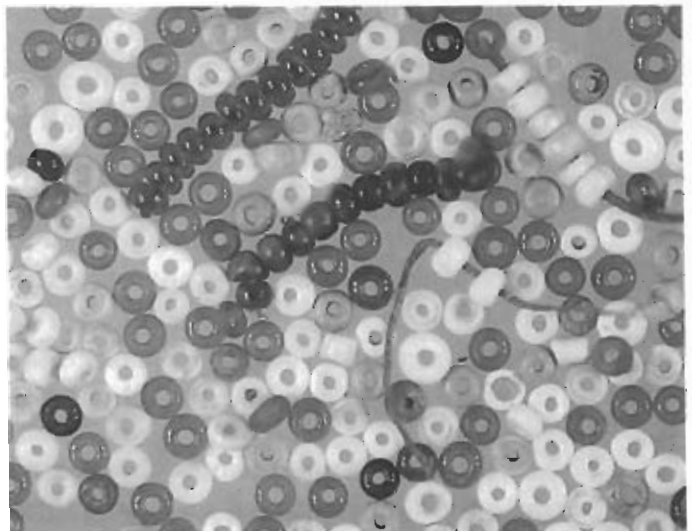
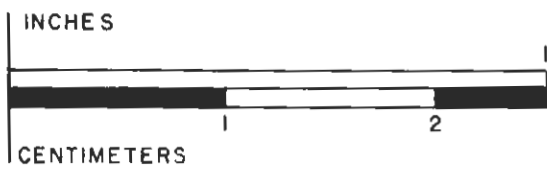


Figure 58 — Drawn Seed Beads



THE HUMAN SKELETAL REMAINS

by

Paul R. Nickens

INTRODUCTION

Detailed descriptions of historic Ute Indian biological and skeletal characteristics are generally absent in the literature. Unfortunately, this discrepancy includes single specimens as well as metric, nonmetric, and pathological conditions for the population as a whole. This analysis takes a first step toward achieving better and more complete descriptions of Ute burial situations, primarily in the form of osteological data.

The specimen discussed herein was excavated near the Uintah and Ouray Indian Reservation in northeastern Utah. The burial and accompanying artifacts were discovered in Uintah County, and have been designated as 42UN1225 in the statewide archaeological survey system. The human osteological elements of the burial were made available through the courtesy of Richard E. Fike, Bureau of Land Management State Archaeologist for Utah. Following the analysis, the skeleton was returned to the Bureau of Land Management for reburial by the Ute Tribe.

MATERIALS AND METHODS

The historic aboriginal burial from site 42UN1225 was recovered in 1982, under the general direction of the Bureau of Land Management. With the body in the rock crevice, were several artifacts, including clothing, textiles, horse equipment, numerous beads, an axe, a clay pipe, and personal ornaments. Horse bones were associated with the grave site. Analyses of the artifacts indicate a probable date for burial between 1850-1875. The location, burial situation, and gravegoods leave little doubt that the burial is Ute.

The human bones, as received from the Bureau of Land Management, were generally in excellent shape with a good degree of preservation. Some minor weathering of the distal end of the right femur and the right radius was noted. All skeletal components were present except the patellae and some of the hand and foot bones. The cranium was intact with dried scalp and dark black, straight hair covering much of the calvarium, which prevented observations for certain nonmetric features. Two maxillary incisors were absent, both lost postmortem. Much of the thorax was still held together by skin and ligaments, as was the right forearm and hand. The bones of the lower extremity were all loose.

Upon receipt the bones were individually identified by paper tags bearing the site number; no cataloging was done on the bones themselves. Cleaning was restricted to use of a dry brush and washing of those bones without skin or hair. No deliberate attempt was made to separate bones connected by tissues; however, some did come apart as a result of handling. No other special methods were employed.

The bones were measured with sliding and spreading calipers, and a metric bone board. Fortunately, the attached condition of some of the upper body bones did not preclude many measurements. Macroscopic observation was undertaken on all bones for general morphological characteristics, nonmetric markers, and possible pathological conditions. A series of radiographs, made in Salt Lake City, was received along with the skeletal materials. No sectioning of bone was undertaken and, as noted above, no marking was done on the bones. Thus, the analysis was nondestructive, an important consideration when reburial is anticipated.

BURIAL DESCRIPTION

General

The burial is that of an adult male. The age at time of death was probably between 25 and 30 years. Union of all epiphyses is complete and the pubic symphysis fit best into Phase V of the Todd system, or age 27-30 years. Relative indicators such as dental attrition and a lack of vertebral osteophytosis also support this age assessment. All standard osteological sex characteristics are male.

Employing Genoves' (1967) method, stature has been calculated to be about 166.6 cm (5'6"), as averaged between the femur and tibia measurements (femur=168.079 cm; tibia=165.096 cm). No comparative height data are available for early Northern Utes; however, the estimated stature for the burial from 42UN1225 is very close to an average of 166.85 cm given for Southern Ute males by Hrdlicka (1908:133). This average, based on measurement of 50 Indians, was obtained during the first decade of the twentieth century from Utes living in southwestern Colorado.

Metric Observations

Anthropometric measurements and indices for the skeleton from 42UN1225 are given in Tables 6 and 7. Comparative analysis is reserved for a later section.

Nonmetric Observations

The presence, absence, or expression of the more important nonmetric traits are summarized in Table 8. General descriptions for cranial and post-cranial traits are given below.

TABLE 6
CRANIAL MEASUREMENTS (IN MM) AND INDICES

Cranium		Mandible	
Maximum length	182	Mandibular length	115
Maximum breadth	140	Bicondylar breadth	125
Minimum frontal	100	Bigonial breadth	102
Basion-Bregma height	127	Left ramus height	61
Auricular height	112	Left ramus minimum breadth .	34.5
Total facial height	110	Symphyseal height	28.5
Upper facial height	59	Inter-foraminal breadth	45
Bizygomatic breadth	135	Coronoid height	15
Nasal height	49	Body thickness (M2)	14.5
Nasal breadth	25		
Left orbital height	34		
Right orbital height	35		
Left orbital breadth	38		
Right orbital breadth	37		
Inter-orbital breadth	25.5		
Exterior palate length	56		
Exterior palate breadth	63		
Interior palate height	16		
 Indices			
Cranial	76.9	(medium)	
Length-height	69.7	(low skull)	
Breadth-height	90.7	(low skull)	
Upper facial	43.7	(broad face)	
Total facial	81.5	(broad face)	
Nasal	51.0	(medium)	
Orbital	89.5	(narrow)	
Mandibular	92.0		

TABLE 7
POSTCRANIAL MEASUREMENTS (IN MM) AND INDICES

Measurements	Right	Left
Humerus		
Length	320	316
Maximum head diameter	44	42
Distal end breadth	56	56
Anterior-posterior midshaft diameter	21	—
Medial-lateral midshaft diameter	16	—
Ulna		
Length	259	259
Radius		
Length	242	239
Femur		
Length	450	448
Bicondylar length	446	444
Anterior-posterior subtrochanteric diameter	23.5	26
Medial-lateral subtrochanteric diameter	26	29
Anterior-posterior midshaft diameter	27	26
Medial-lateral midshaft diameter	24	25
Maximum head diameter	45	44.5
Epicondylar breadth	81	80
Tibia		
Length	364	365
Physiological length	361	360
Maximum diameter proximal end	76	75
Nutrient foramen anterior-posterior diameter	31.5	30
Nutrient foramen medial-lateral diameter	21.5	21
Fibula		
Length	352	352
Clavicle		
Length	148	153
Innominate		
Length	202	200
Breadth	148	146
Sacrum		
Height		122
Breadth		115
Indices	Right	Left
Radius-humerus	76.7	75.6
Humerus-femur	70.5	71.1
Platymeric	90.4	89.7
Platycnemic	68.2	70.0
Tibia-femur	80.9	81.5
Femur-robusticity	11.3	11.4
Sacral		94.3

TABLE 8
NONMETRIC OBSERVATIONS

Cranial	Observations
Sutural bones	None observed (scalp covers large portion of cranium)
Tympanic bone dehiscence	Absent
Supraorbital foramen	Both closed
Accessory mental foramina	Present, bilaterally
Metopic suture	Present, trace
Zygo-maxillary tuberosity	Present, slight
Orbital form	Square, horizontal
Auditory meatus	Round
Palatal form	Parabolic
Nasal profile	Straight
Supraorbital ridge	Medium
Chin form	Bilateral
Chin projection	Medium
Pterion form	Unobservable
Palatal torus	Absent

Postcranial	Observations
Sternal perforation	Present, large — 9 mm
Perforated olecranon fossae	Absent
Sacral segments	Six
Femora	
Third trochanter	Absent
Linea aspera	Present, moderate development
Squatting facets, tibiae	Present bilaterally, small

Cranial (Figures 59 and 60)

Cranial deformation is absent. The vault form is sphenoid with a very slight sagittal elevation. Sutural patterns are for the most part unobservable due to the scalp covering. The left half of the lambdoidal suture has no wormian bones and *Os Inca* is not present. On the frontal bone, there is a distinct trace of the metopic suture. The frontal slope exhibits a medium situation between the vertical and acute angle. The brow ridges are fairly prominent, continuous and V-shaped, with bilaterally closed supraorbital foramina. The facial build is average with vertical prognathism and projecting zygoma. The orbits are squarish and the nasal profile is straight. Alveolar prognathism is slight. The mastoid processes are medium-sized and elongated. The auditory meatus openings are round with a funnel-shaped canal; tym-



Figure 59 — Facial view. Note scalp covering calvarium, trace of metopic suture, calculus development on teeth, periodontal degeneration, and crowding in mandibular incisors.

panic dehiscence is absent on both sides. The apex of the occipital region is medium to low and there is a fairly well developed nuchal area (observation on this part of the calvarium was limited). The chin form is bilateral and there is a small deformity on the left side of the chin, possibly traumatic in origin although neither macroscopic nor radiographic observations yielded positive evidence. Accessory mental foramina are present on both sides of the mandible. Gonial eversion is present but slight.

With regard to the dentition, the incisors are slightly shovel shaped, and there is some crowding in the lower central incisors. Alveolar resorption and periodontal pitting is present, although not severe, and is more prevalent in the anterior portion of the mouth. There is also a slight to medium development of calculus deposit, primarily on the pre-molars, canines, and incisors. The molars exhibit a Y-5 pattern and there are small enamel pits on the buccal sides of the mandibular first and second molars. All third molars are fully erupted and the maxillary ones have fused roots. A radiograph indicated taurodont condition in the mandibular third molars. Occlusion is normal. Attrition is average for an individual of this age with wear to the dentin on the incisors and canines and small dots of dentine showing on the premolars and first molars. The second molars have enamel wear and the third molars are only slightly worn.

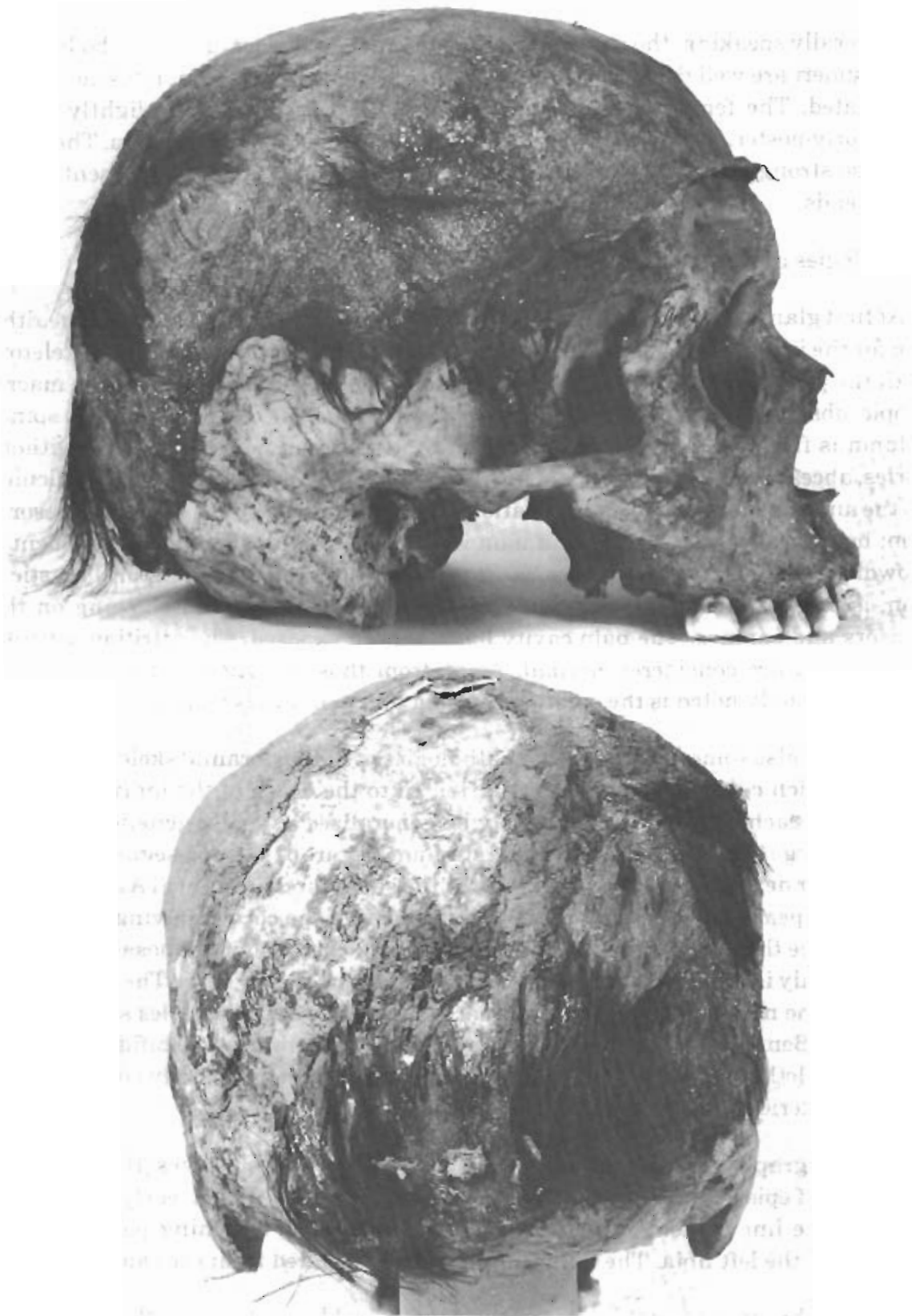


Figure 60 — Cranial views, side (upper), rear (lower). General cranial features can be seen, along with the degree of preservation of the scalp and hair.

Postcranial

Generally speaking, the postcranial skeleton reflects a stout, muscular body build. The humeri are well developed and moderately strong, the olecranon fossae are not perforated. The femora are similarly strong, well developed and slightly bowed anteriorly-posteriorly. There is a medium development of the linea aspera. The tibiae are also strong and slightly sabershaped; small squatting facets are present on the distal ends.

Pathologies and Anomalies

At first glance, the skeleton from 42UN1225 appears to reflect a somewhat healthy life for the individual. There are no evidences of traumas or injuries to the skeleton, with the possible exception of a small healed lesion on the chin. Neither the macroscopic observations nor the radiographs indicated healed fractures. The spinal column is free of arthritic development and the dentition is in good shape without caries, abscesses, or enamel hypoplasias. There is a moderate development of calculus on the anterior teeth, and some indication of periodontal disease and alveolar resorption; but these are not severe for a man in his late twenties. There is slight dental crowding in the mandibular incisors. Physiologic attrition, due to natural mastication, is present on the occlusal surfaces of the teeth with dentin showing on the incisors and canines. The pulp cavity has not been exposed. The attrition severity and pattern are considered normal. Aside from those mentioned, the only other cranial anomaly noted is the small expression of a mandibular torus.

There are also some anomalies and pathologies of the postcranial skeleton, including one which could have possibly contributed to the death of the individual. The anomalies, each of which can probably be generalized as being genetic in origin, include a large (9 mm) perforation in the sternum (Figure 61B), a six-segment sacrum and a minor development of spina bifida in the sacral arch (Figure 61A). The sixth-segment appears to be a result of the first segment of the coccyx having joined the sacrum since there are five lumbar vertebrae present, ruling out lumbosacral fusion. This anomaly is not uncommon in skeletal populations (Reed, 1967). The incomplete closure of the neural tube occurs in the sacral segments and resembles spina bifida occulta (cf. Bennett, 1971; Devor and Cordell, 1981) rather than spina bifida cystica, a potentially lethal condition. In contrast, spina bifida occulta is fairly common and has no deleterious significance for health.

The radiographs revealed the presence of some faint transverse lines (Harris Lines) indicative of episodes of cessation of bone growth, probably during early childhood. There is one line evident in the distal left radius, and a matching pair near the midshaft of the left tibia. The latter lines probably resulted from the same incident.

Perhaps the most critical evidence for a health problem is found in the vicinity of the sternoclavicular joint, involving the sternum, and the medial ends of the clavicles

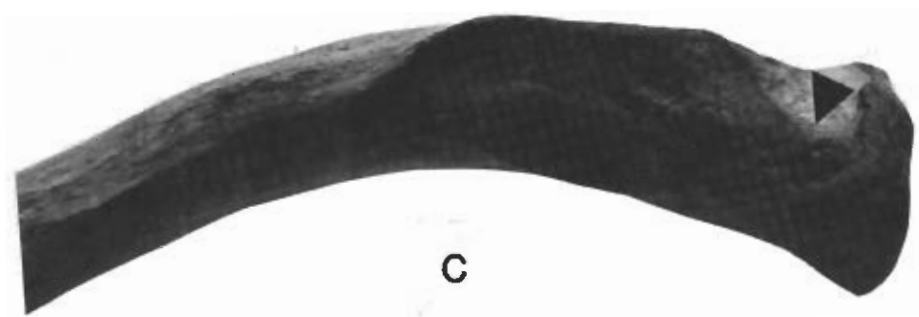


Figure 61 — 42UN1225: Anomalies and pathologies.

A) Sacrum showing sixth segment expression and minor development of defects in the sacral arch.

B) Sternum with large perforation. Note also preservation of the cartilages.

C) View of the medial end of a clavicle indicating osseous inflammatory reaction (below arrow).

and the first ribs. Here, there was substantial indication of an inflammatory reaction, probably centered in the manubrium and spreading to the adjoining bones. Each of the clavicles have an osseous disturbance in the area of the impression for attachment of the rhomboid ligament (Fig. 61C), and the two first ribs are affected near the osteocartilaginous border.

These bones were examined by the Montrose County, Colorado, Coroner who observed the infection is not unlike tuberculosis. While this diagnosis cannot be accepted as absolute because of other possibilities, it seems a good bet. Ortner and Putschar (1981:143,162) note that skeletal tuberculosis of the sternum, while not common, does occur with some frequency. When found in this context, the manubrium is most frequently affected and the lesions may extend into the sternoclavicular joint and involve the medial portion of the clavicles. In the case of the individual here considered, the cortex of the manubrium was not perforated; however, both clavicles exhibit perforation of the posterior cortex.

As a consequence, although it cannot be stated for certain that tuberculosis is the cause for these infections, it must be considered as a likely candidate. Of interest is the information assembled by Hrdlicka (1908, 1909) for the Ute in the early twentieth century which indicates high levels of both morbidity and mortality for this chronic infectious disease (see Table 9) among both the Northern and Southern Ute. In fact, of a total of 71 tribes/agencies analyzed by Hrdlicka, the Uintah Utes ranked 14th in the frequency of pulmonary tuberculosis, 8th in bone and joint tuberculosis, and 11th in glandular tuberculosis. Moreover, in the first decade of this century, deaths attributed to tuberculosis among the Uintah Utes were more than five times the average for whites. Without a doubt, then, tuberculosis was a severe health problem for Utes in the early reservation days and, circumstantially based on the noted prevalence of the disease among the Ute and the lesions apparent in the skeleton, it may be suggested that the individual under discussion had tuberculosis and that he may have died as a result of it. However, this diagnosis is not certain owing to the inherent difficulty of identifying specific disease forms in skeletal materials.

CONCLUSIONS AND COMPARISONS

The skeleton from site 42UN1225 almost certainly represents that of a Ute male who died between the ages of 25 and 30, possibly due to the presence of an infectious disease such as tuberculosis. Aside from the infectious disease, the individual's skeletal components reflect a relatively healthy situation in terms of other osseous pathologies. The geographic location of the burial and the manner of interment leave little doubt of the cultural affiliation as the place of burial and the artifactual remains adhere closely to previously reported Ute burials.

As noted earlier, few Ute skeletons have been subjected to intensive analyses. Based on a sample consisting primarily of crania, Reed (1966:150) described Ute

TABLE 9

TUBERCULOSIS MORBIDITY AND MORTALITY AMONG UTES
IN THE EARLY 20th CENTURY

(Hrdlicka 1908:210-211 and 1909:Tables 1 and 2)

Morbidity (in 1904)	Cases of tuberculosis per 1,000 population		
	Pulmonary	Bones and joints	Glandular
Fort Lewis School, Colorado	11.2	5.6	—
Southern Ute Agency, Colorado	2.4	—	—
Uinta Agency, Utah	25.3	6.3	37.9

Mortality (in Fiscal year 1907-8)	Census	Number of Deaths — Pulmonary ¹	Proportion per 1,000	Deaths from
				Tuberculosis other than Pulmonary
Southern Ute, Fort Lewis, Colorado	453	4	8.8	—
Ute, Uinta and Ouray, Utah	1261	9	7.1	1

¹Among whites of the United States the average proportion of deaths from pulmonary tuberculosis per 1,000 population was approximately 1.7 at the same point in time.

skulls as “characterized by long and narrow extremely low vaults, with occipital protrusion, strong occipital tori, long narrow foreheads and flaring zygomatic arches, very prominent large narrow noses, moderate browridges of median type, large square horizontal orbits, slightly concave suborbital fossae, rather strong alveolar prognathism, prominent bilateral chins, and slight eversion of the gonial angles”. In most respects, the cranium from 42UN1225 fits very well with this generalized description. Similarly, the cranial indices contained herein for the cranium from 42UN1225 fall within the ranges noted for the small sample of Utah Ute crania reported by Reed. Some Ute cranial measurements and indices have also been published for Colorado by Renaud (1933, 1941), which are also in line with those of Reed and the specimen from 42UN1225.

Other comparative osteological data for a Ute skeletal series are rather limited at this point in time. Apart from Ute crania, which have been accorded the lion's share of attention in the literature, very little concerning skeletal measurements and observations has been reported. In fact, published noncranial data for Ute males are restricted to one example, reported in an appendix by Reed (1966:152-154). In that case, the skeleton of an adult Ute male, found in Spanish Fork Canyon, Utah, was described as having a probable age at death of about 37. Pathologies noted include spondylolysis (a semi-detached neural arch) in the fifth lumbar vertebrae and a healed fracture in the left fibula. In most respects the cranial and postcranial measurements and characteristics of the Spanish Fork skeleton are similar to those of the skeleton from 42UN1225, with the exception of a slightly taller stature. Based on long bone measurements, a stature of about 173.8 cm (5'8½") was calculated. Reed, however, used the Trotter and Gleser male "Mongoloid" formula; recalculated by Genoves' formulas, the stature for the Spanish Fork Canyon individual computes between 169.8 and 170.8 cm).

Concerning stature, besides the figure of 166.6 cm for the skeleton from 42UN1225 and that for the Spanish Fork Canyon skeleton noted above, Renaud (1941) has reported two reconstructed statures for Colorado Ute male specimens as 163.5 cm for a skeleton found near Meeker and 171-172 cm for a burial from La Veta. Unfortunately, Renaud utilized a now outdated method for calculating stature for his skeletons and he did not report long bone measurements, thereby precluding the possibility of recalculations. In the absence of a large number of archaeological specimens, it is probably best to again note Hrdlicka's figures for living Southern Ute stature (mean of 50 individuals = 166.85 cm) as a point of reference. Moreover, the range of variation in Hrdlicka's male sample extended from 155 to 180 cm, which easily incorporates all the above reconstructed skeletal statures, regardless of which method of calculation was used.

A BRIEF ETHNO-HISTORICAL OVERVIEW OF THE UINTAH UTE

INTRODUCTION

Archaeological evidence in Pariette Draw and environs suggests a sequence of occupation and aboriginal use from the Plano to the present. Pariette Draw, an oasis in a badlands environment, provides a unique travel corridor across arid regions of the western Uintah Basin. Prehistoric and historic aboriginal sites are clustered here and along the nearby Green River and its tributaries. Settlement of the area may be a specific manifestation of a broader adaptive pattern utilized by aboriginal peoples in a desert environment.

The Ute currently reside on two reservations in southwestern Colorado and one in northeastern Utah. Historically, their region encompassed western and central Colorado and central and eastern Utah. In Utah, two reservations were originally created: the Uintah Valley Reservation in 1861, and the Uncompahgre in 1882. Both were later combined as the Uintah and Ouray Reservation (Figures 62 and 63).

The coalescence of Indian groups into larger cohesive bodies began as a direct result of white or anglo American influence, e.g., horse, metal weapons, religion. This force promulgated a change beginning in the 16th century, of traditional native American beliefs and cultural practices. The Utes, in comparison to their Plains cousins, were late, beginning their transition in the early 17th century and not completing it until the 19th century (Smith, 1974).

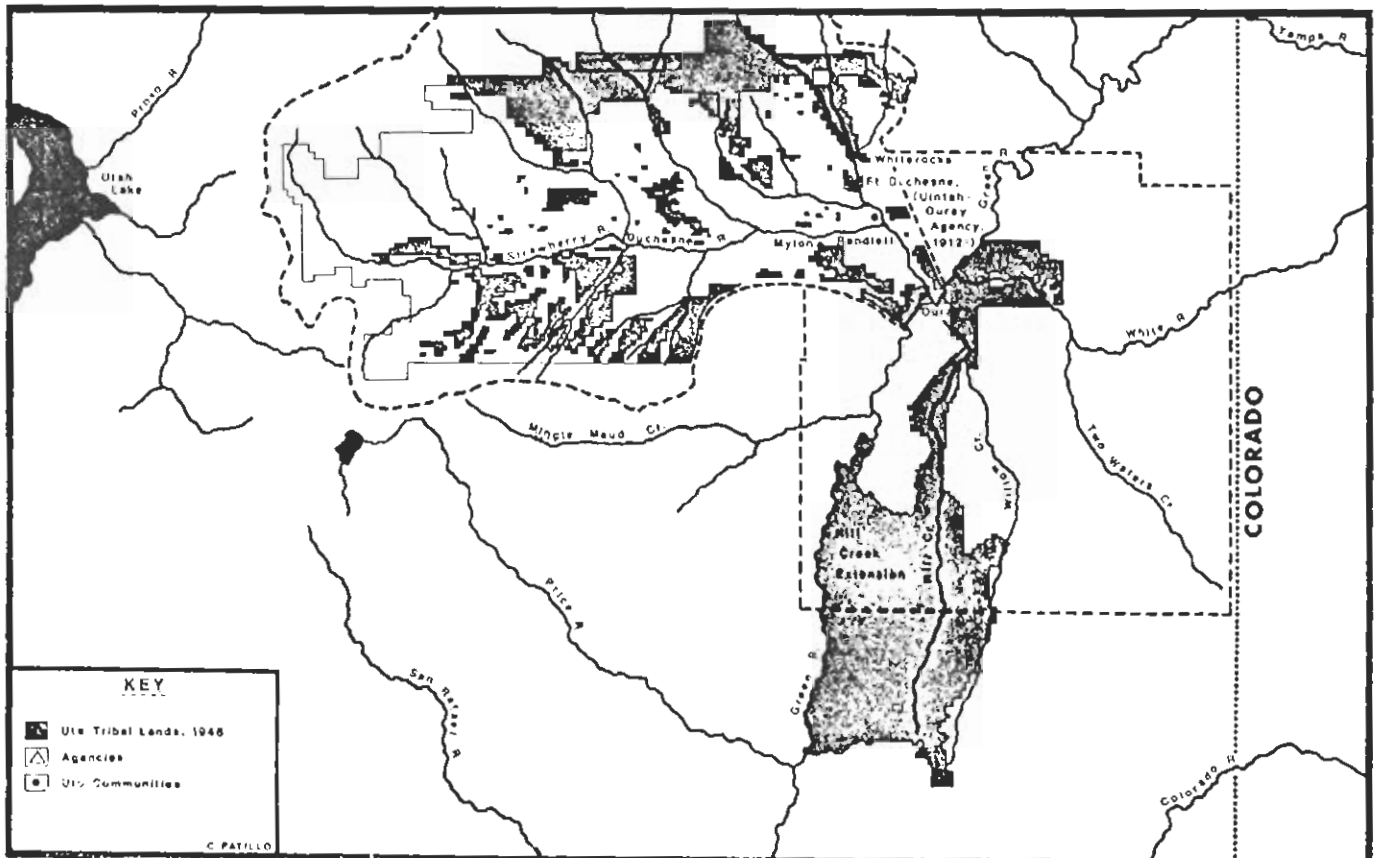
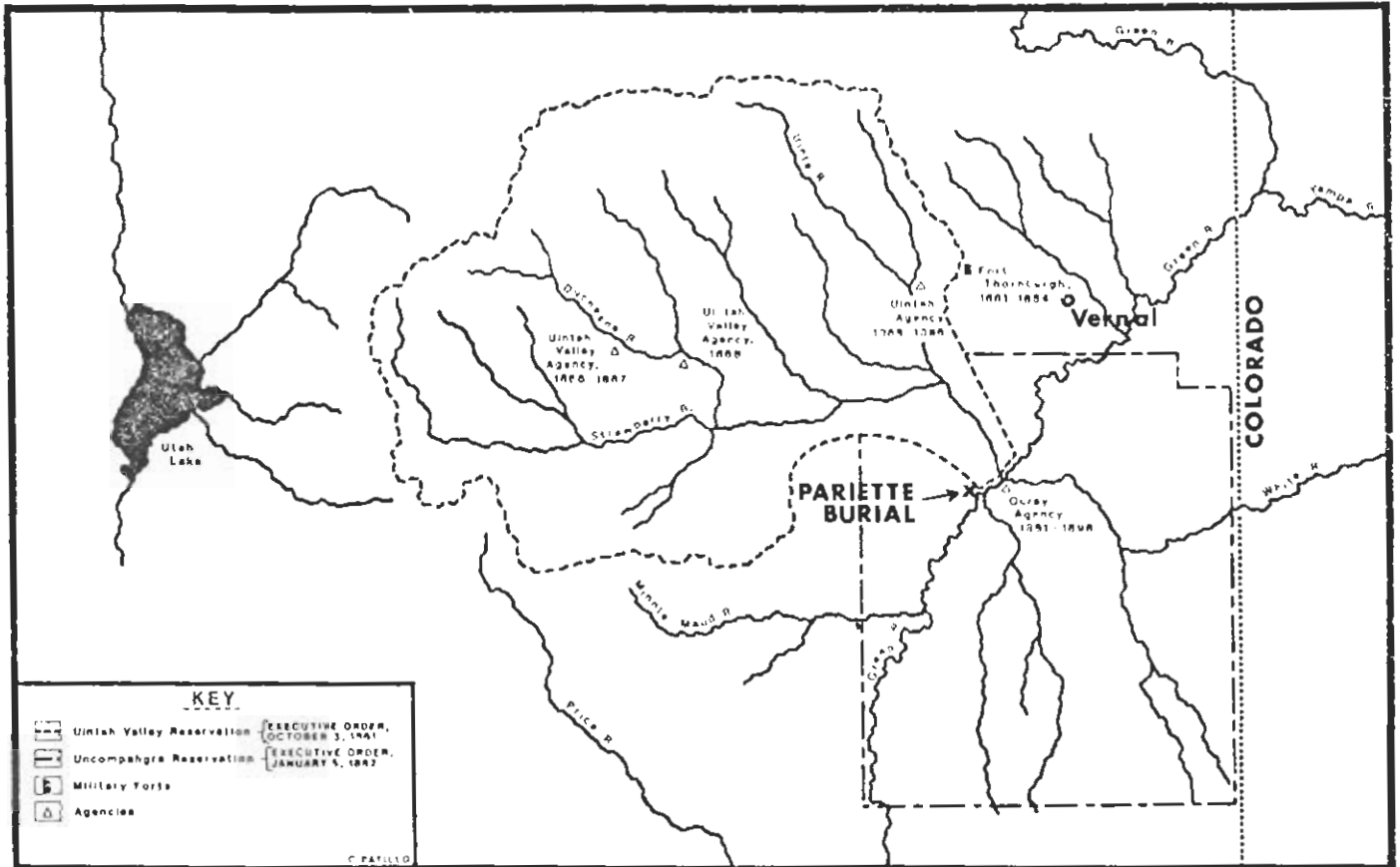
Other publications critique the consolidation of the subgroups or bands and present the problems in identifying the location and movements of the groups prior to the reservation period. Those interested should consult this work.

Ute Social Structure Pre-equestrian Period

About A.D. 1300, ancestors of the historic Ute entered the area, this evidence is just beginning to emerge (Jones and MacKay, 1980). Historic documentation of the Ute and their lifeways is limited to a few ethnographic sources such as the 1776 Escalante Journal and brief sketches by early 19th century trappers and explorers. Steward (1974) succinctly summarizes the situation: "...little concrete description of early Ute culture exists".

Concerning Ute origins, Goss (1968), Kroeber (1939), Lowie (1924), Malouf (1964), Smith (1974), Steward (1939, 1940, 1970, 1974), Stewart (1964, 1966), and Wissler (1957) posit many divergent theories but arrive at no consensus. Explanations include in situ development from an Archaic base with co-adaptation with the Fremont, and infusion from developments in either the Southwest or Plains.

WYOMING



Figures 62 and 63 — Utah Ute Reservations: Top — Uintah Valley and Uncompahgre Reservation, 1861-1898; Bottom — Uintah and Ouray Reservation today with the 1948 Hill Creek Extension (adopted from Conetah, 1982).

Steward's (1940) statistical correlations of shared cultural elements in the intermountain cultural area failed to create dialectic, cultural or political boundaries. Differences were explained by importation of cultural elements from adjoining areas. Steward's (1974) later formulation of Ute adaptive patterns in the Uinta Basin suggested that these peoples formed an "...area of principle occupation or nuclear settlement". Isolation occurred because of the impenetrable nature of the Uinta Mountains to people who's sole mode of transportation was on foot. With the horse, however, the situation changed.

Equestrian Period

For the most part, the horse and Euro-American contact are responsible for the dramatic shift in the social structure of the Ute. The change began in the latter years of the 17th century and the effort varied by band (Smith, 1974). Steward (1974), postulates that the 1680 Pueblo Revolt was a precipitator because the confrontation provided the Colorado Ute with sufficient horses to become middlemen in horse trading between the southwest and high plains aboriginal groups. The Uintah Ute were less fortunate and saw little contact and few horses until the second quarter of the 19th century (Smith, 1974). Some scholars posit a basin-plateau cultural orientation for the horse mounted Ute, others question the degree to which the horse influenced the Ute social structure.

A basic premise is that with the acquisition of the horse and animal husbandry, the Utes moved onto the plains where they acquired cultural traits that were developed or being developed by horse-mounted Siouan, Algonquian, and Uto-Aztecan speaking peoples. The horse enabled groups to be more geographically versatile and to carry greater burdens. Trade and expansion accelerated, thus changing tribal social configuration. Today, divergent views on societal structuring exist, a woodlands origin is one hypothesis (Wissler, 1957). Also, the adoption of bison hunting by mounted Ute, Shoshone, and Nez Perce, is considered responsible for replacement of the nucleated family structure by a band level organization.

Movement to the plains to hunt bison was gradual and only small herds were available in Utah prior to 1830. Bison in western Colorado and Utah were extinct by 1870. This forced the Utes to move into Wyoming and eastern Colorado to hunt. Dependence upon small game hunting, traditional among basin-plateau cultures between 1800-1870, was dropped by the Ute and Northern Shoshone. They began hunting bison and other large game on horseback; the Uintah Ute were the exception since few horses were available. As the tradition changed, the social emphasis shifted from a family based territorial subsistence economy to that of a semi-nomadic lifestyle informally led by a charismatic leader. Often the bands dissolved into nuclear family units after the seasonal hunt. These smaller groups utilized a basin-plateau foraging structure which aided in surviving the rigors of winter. However, membership probably changed more frequently than in the pre-horse period and winter villages may have come into existence at this time.

The social dichotomy of hunter, warrior, and trader bands is strictly an equestrian related phenomenon which was not present in pre-horse Ute social units (Steward, 1970). Any hypothesis concerning Ute culture change is hampered by a profound lack of knowledge concerning the origin of plains cultural traits. Impressions of Ute lifestyle is influenced by the vivid memories of native Americans and Euro-Americans who remembered the violent confrontations between alien cultures in the 19th century (Malouf, 1964). Ethnographers may have failed to adequately take these memories into account when thinking through the cultural configurations of 19th century horsemounted groups.

The Contact Period

Between 1810 and 1840, the initial integration between native American and Euro-American cultures occurred. By 1840, game population decreases may have caused the Utes, Northern Shoshone, and various plains groups to shift their subsistence base (Murphy and Murphy, 1960).

Malouf (1964) has stated that “. . . as far as Great Basin ethno-history is concerned . . . , some historical events and processes are so recent that they are current rather than *passe*, and they can be studied now rather than merely reconstructed from evidences of the past”. Ute-Anglo memories from the 1850's to the 1880's are still fresh; animosities are still carried by members of both communities. Mormon settlement, after 1850, seriously disrupted the lives of the Timpananunt, Sampit, and Pahvant Ute (Figure 64). In 1861, a Presidential decree set aside the Uintah Valley as a reservation for the Utes and all Utah Indians; confirmation was made by Congress in 1864. Reluctantly, the Utes signed the Spanish Fork Treaty in 1865 (which was never ratified by Congress) and began moving to their new home. This amalgamation created the Uintah band. Not all Utes made the move and the Southern Paiute, for example, never did. The Mormon settlers, instrumental in creation of the Act, remained on the Reservation causing much undue strife and hardship (Smith, 1974; Steward, 1974). In 1868, the Kit Carson Treaty was also signed, its further provisions leaving “. . . only new unfulfilled promises to the Ute people for larger cessions of land” (Conetah, 1982).

The coalescence of many Ute in the Uintah Valley prompted a greater dependence upon grazing, agriculture, and mining. Other groups roamed nomadically, as they had in the past, throughout eastern Utah and Colorado. Political organizations were formed based upon informal aggregates of families who gave temporary allegiance to prominent members of one aggregate or another.

Persons were called “chiefs” for temporary leadership in dealing with Anglo pressures (Smith, 1974). The perplexity of ethnographers trying to identify chieftainships of bands is obvious (Stewart, 1959 in Smith, 1974). The selection of a chief was not uniform. For some, chiefs represented more than one band (Smith, 1974). No doubt, the most charismatic individuals temporarily spoke for others in dealings with the

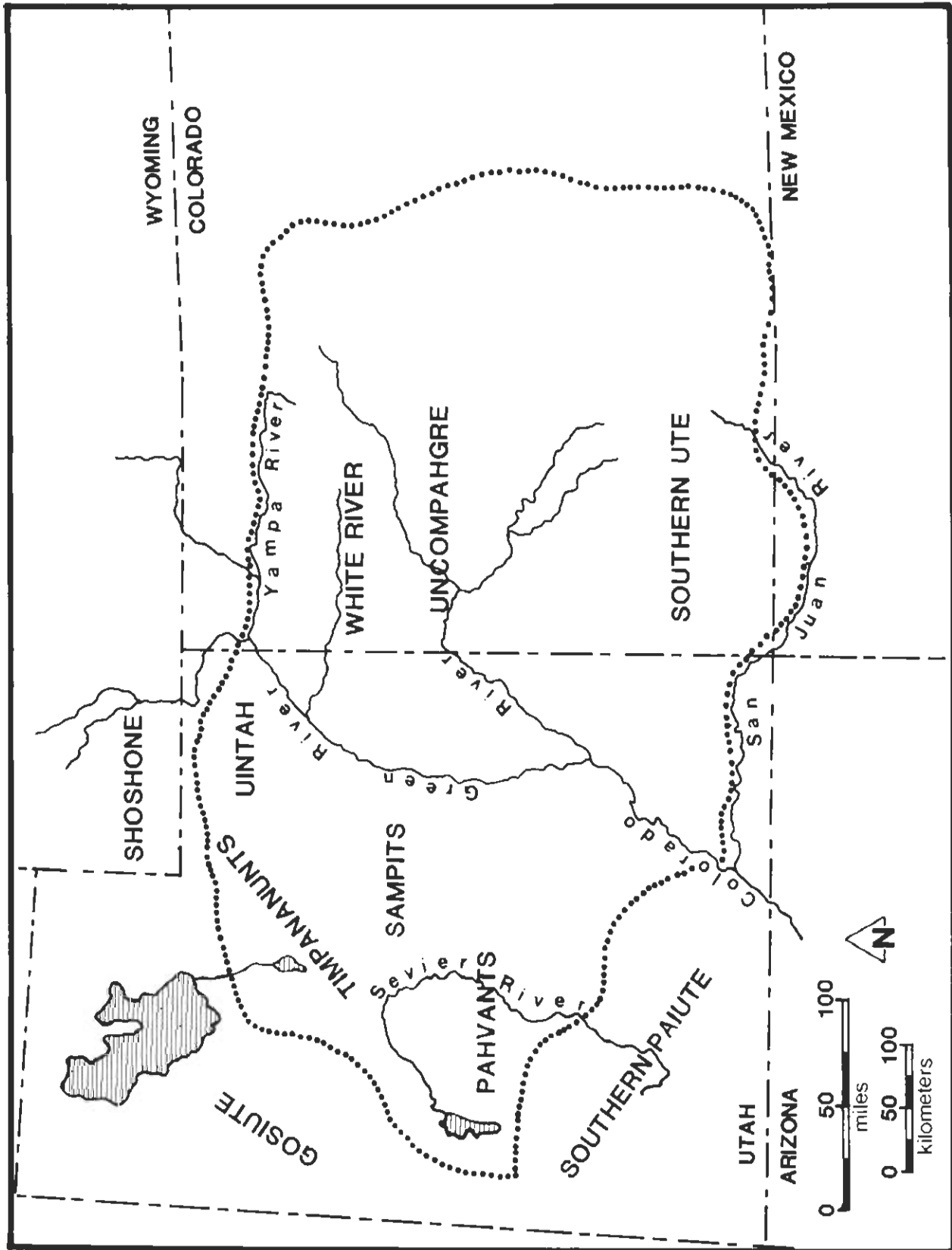


Figure 64 — Distribution of the pre-reservation era Utes and neighboring groups (adapted from Smith, 1974; Steward, 1971).

Anglo establishment. A duality developed where a group developed a socio-political system that was governed by “peace chiefs” and “war chiefs.” The latter organized followers who made raids for predatory purposes. Civil chiefs achieved prominence in some Ute groups as a result of diplomatic negotiations with “the white man” (Stewart, 1939, 1970).

A socio-political system is evident, then, that was alien to Basin cultural patterns. The development of these offices as a response to predation by other tribes on the Plains, as well as by the whites, indicates adaption to conflicts brought about by an equestrian lifestyle and invasion by alien cultures. Whether this social configuration of bands with charismatic leaders continued is unknown. Not all groups adopted such a system because of a differential response to utilization of the horse and Plains culture traits.

The Ute and Northern Paiute found survival difficult with their relocation to the Uintah reservation. In this situation, the bands social structure lost its order and function. No longer could the bands or predatory groups hunt bison or war with the whites. War honors and Plains material culture were lost to Ute society, which reverted back to the Basin style and a nuclear family social configuration (Steward, 1970).

Charismatic “chiefs” like Walker and Ouray are probably notable exceptions, their bands persisting (Steward, 1970). The use of the term band is misleading as the Utes, Northern Shoshone, and Northern Paiute utilized short-lived, multi-functional aggregates, also referred to as bands by the ethnographers. Most of these basin-like temporary, nomadic, aggregates were predatory for purposes of conducting raids on homesteads and immigrant wagons, stealing horses and food stuffs, or hunting buffalo. They supplemented their meager existence by use of small game, seeds, and roots.

Nathan Meeker, agent for the White River Utes in northwest Colorado, and twelve soldiers were killed by the White Rivers in the fall of 1879. This incident prompted the government to move all extant Ute groups to reservations (Conetah, 1982). The White River were moved to the Uintah Reservation; the Uncompahgre were moved to the Upper Colorado River (adjacent to the Uintah Reservation) that was created in 1882. These groups became known as the Northern Ute. The Southern Utes agreed to settle in southwestern Colorado, the Mohauche and Capota bands on the Southern Ute Reservation, the Weminuche on the Ute Mountain Reservation (Conetah, 1982; Jorgensen, 1972; Opler, 1940).

Disputes on and between various Ute groups on both the Utah reservations created the need for military justice, and “. . . in August 1886, Major F. W. Benteen arrived with troops of the Ninth Cavalry. These troops were blacks or ‘Buffalo Soldiers’, as the Indians called them.” (Conetah, 1982). In September 1887, land was set aside and Fort Duchesne established, about half way between the reservation agencies of

Uintah and Ouray. About the same time, the two agencies were consolidated, at Whiterocks, as the Uintah and Ouray Agency. About 1898 — 1905 the two reservations were combined and officially called the Uintah and Ouray Reservation. The agency was moved to Fort Duchesne in 1912 upon abandonment of the post by the military (Conetah, 1982).

This brief summary of the Ute groups known to have utilized the areas around Pariette Wash presents a picture of stress. Considering the effects of intergroup mixing, and misidentification and presumed mobility of mounted groups, the major shifts that occurred in Ute lifeways and social structure become apparent. How the individual buried at Pariette was involved in these dramatic changes is unknown.

In retrospect, the person in the crevice from Pariette Draw represents the beliefs and cultural practices of a rapidly influenced and changing society, a culture whose expression was ephemeral, influenced to varying degrees by coexisting aboriginal societies.

PARIETTE BURIAL REINTERMENT

On the afternoon of April 27, 1983, the Pariette burial was reinterred in the Cactus Flats Cemetery ca. 1.5 miles northwest of Ouray, Utah. A pit, about 9X5X5 feet, was dug into the partially cemented gravels of the river terrace and a concrete burial vault inserted. Prior to reburial, Clifford Duncan, Shaman of the Uinta-Ouray Ute, performed a cedar ceremony which involved the lighting of a small sprig of Juniper. After burning, the fire was extinguished and the smoking twig was waved over and around the boxes while a prayer was spoken. This prayer, in Ute, asked the spirit of the deceased not to harm any of those who had disturbed its rest:

Creator of the Universe: We come before you again in this great light you created — with good intentions. Whatever may have been the ritual surrounding this creation of yours — we accept, and we need your guidance this day, and we ask the spirit of creation not to harm any of those who had disturbed its rest. I close my prayer (Clifford Duncan, personal communication, 1984).

The three cardboard boxes containing the skeletal material were placed within the vault with the one containing the cranial material oriented east and the box containing the leg and lower bones to the west. BLM personnel assisted a local mortician from Roosevelt in this task. The lid was then placed on the vault and a thin layer of gravel spread over it.

The grave will remain unmarked. At no time did the Utes touch the boxes containing the skeletal materials. This was in accordance with Ute beliefs and customs.

Conversations with the Ute during the course of excavation and analysis were stimulating. Some views are capsulated here, hopefully their rendition is accurate, however, no substantive comparison has been made.

The Ute believe all things (animate and inanimate) also have their place. Each relates to one another in a foreordained way. Events occur because they are foreordained. The spirit of the body in the crevice inhabits a territory of unknown extent around the monolith. This spirit has likes and dislikes including objects in the surrounding terrain. For example, if someone had picked up a rock that the spirit liked, the alarmed spirit could cause harm to the offender. The exhumation was a result of a pack rat relocating a bone so that it became visible. (It is interesting to speculate if this was a violation of Ute belief in the sense that the body's rest was disturbed and the spirit offended or if it was foreordained as a part of the Ute world order.)

The location of the burial in the monolith is also of importance to the Ute. Was this elevated position over the surrounding floors of the draw selected because of its position in Ute cosmology? Is it looked at as an upper earth level in an otherwise lower earth setting. The Ute believe in; 1) an "upper earth", i.e., ridges, mountains, and elevated positions; 2) a "middle earth", i.e., slopes alluvial fans, foothills, etc.; and 3) a "lower earth", i.e., valleys, canyon bottoms, etc. Each "earth", has its animal spirits, ones peculiar to that area and Ute families adopt these spirits for their "clan" symbols. (Joe Pinnecoose and Clifford Duncan, personal communication, 1982).

AN OVERVIEW OF ETHNOGRAPHICAL AND ARCHAEOLOGICAL DATA FOR UTE BURIAL PRACTICES

By

Paul R. Nickens

INTRODUCTION

The present-day Ute groups are nucleated on three reservations, the Southern Ute and Ute Mountain Ute Reservations in extreme southwestern Colorado and the Uintah and Ouray Reservation in northeastern Utah. In pre-reservation times, the Ute inhabited the region now covered by central and eastern Utah and western and central Colorado (Figure 64). Within this large expanse, several subgroups or bands were formerly defined and, in a larger cultural setting, the Ute could be generally divided into the Utah or "Western" Utes and the Colorado or "Eastern" Utes, with the geographic separation occurring along the Green and Colorado Rivers in eastern Utah (Stewart, 1971:Fig. 64). After 1880, the northernmost bands of the Colorado Utes (White River and Uncompahgre Bands) joined the Utah Utes on the Uintah and Ouray Reservations and subsequently became known as the "Northern" Utes (Smith, 1974:10-27; Jorgensen, 1972:32-59). Also at that time the remainder of the Colorado Utes were placed on reservation lands in the southwest part of the state and eventually came to be designated as the "Southern" Utes (Jorgensen, 1972:59-66; Opler, 1940). In actuality, the Southern Ute group is comprised of three formerly distinct bands—the Mohuache, the Capota, and the Weminuche. Of these bands, the first two now occupy the Southern Ute Reservation and the last form the Ute Mountain Ute.

The Ute themselves represent the southern and easternmost expression of the so-called "numic spread" throughout the Great Basin and northern Colorado Plateau (Bettinger and Baumhoff, 1982; Madsen, 1975). In historic times, adjacent linguistically related neighbors of the Ute included the Southern Paiute groups to the southwest, the Gosiute to the west, and the Northern and Eastern Shoshone to the north (see Figure 64). Similar to the ultimate fate of the Utes, these neighboring groups live today within the boundaries of their former homelands, but are settled on isolated reservations.

This study, which developed out of literature review related to the analysis of the Ute burial designated as 42UNI225, is a compilation of extant information related to Ute burial practices in general, as taken from early written accounts, ethnographic sources, and data which have accrued from the archaeological context. The period of time under consideration begins in the 1850s, when the first descriptions of Ute burial practices appeared in the literature, through the first few decades of what Jorgensen (1972:10-12) has defined as the "neocolonial" period in Ute history, or the early reservation era. Thus, the time frame under analysis extends from about 1855 to the mid-1930s.

This period of preand early reservation decades was an extremely critical one for all Ute bands in which they experienced the stresses of contact, acculturation, and eventual placement on geographically restricted reservation lands. This difficulty was particularly noticeable in overall health and population trends. Several diseases, such as influenza epidemics and tuberculosis, took a heavy toll on Ute populations in the early reservation days (Hrdlicka, 1908, 1909). Jorgensen (1972:91) notes that, in terms of numbers, each of the Ute reservations reached a population nadir in the 1920s or 1930s, in each case a culmination of a steady decline since 1880.

With regard to burial patterns, the period under examination was one in which written accounts of such practices began to accumulate in the literature. Generally speaking, these accounts took one of three forms: 1) earlier and sometimes popularized portrayals of Ute burial customs; 2) attention given to the deaths and burials of well known Ute leaders; or 3) collection of ethnographic data by anthropologists, usually from elderly informants. The latter source of information is primarily from the 1920s and 1930s. Primary data from burials themselves did not begin to accumulate until the mid-1930s; however, such information has continued to be collected until the present. Interestingly, data from Ute burial specimens nearly all relate to inhumations dating to pre-reservation times (i.e., ca. 1880 or before), a situation which corresponds with the fact that all such evidence comes from lands that are outside the present-day reservations.

Within this overall context, then, the goals of this review are as follows:

1. To provide a compilation of the various sources of information related to Ute burial practices;
2. To examine and compare the written accounts and the primary data;
3. To compare and contrast temporal changes noted in preand reservation times Ute burial practices; and finally,
4. To provide a brief comparison between Ute burial practices and those of their linguistically related neighbors, the Southern Paiute, Gosiute and Shoshone. This final goal will be approached by examining an archaeological example from each of these adjacent groups.

The methodology employed to accumulate the following information included a review of pertinent literature, accompanied by checking with knowledgeable individuals and regional institutions which might have on hand Ute burial specimens or relevant unpublished data. As a result of these procedures, a sizeable body of information was developed; however, it should be noted that the data presented herein are not considered to be a final compendium of all such information. Other more obscure leads have been developed which, for one reason or another, have not been completely pursued. Another constraint on the discussion which follows is that only one segment of the larger subject of mortuary practice is pursued, that being the actual interment or corpse disposal context. There are, for example, other aspects of Ute mortuary

practice, such as preand post-burial ceremonies and mourning customs and concepts of death fear and fear of the dead, which are not treated. Rather, this discussion deals more specifically with selection of the gravesite, corpse disposal, and offerings. It is this part of the mortuary sequence which is most easily studied and offers the greatest potential for archaeological observation. Thus, another goal of this overview is to provide a framework within which to analyze and evaluate currently known but unstudied Ute burials, as well as future ones which may be located. Finally, there is one more aspect of Ute burials which will not be dealt with here, but is an area of study in which sufficient data are sorely lacking in the published literature. That is good information pertaining to osteological analyses of Ute skeletons, both metric and nonmetric observations, conditions of a pathological nature, and biological characteristics of the population as a whole.

WRITTEN AND ETHNOGRAPHIC DATA

The earliest references in the literature relating to Ute burial practices concern the Western Ute and were generated by the death of the well known Timpananute Chief Walkara (Walker). Walkara's death on January 29, 1855, terminated about ten years of both friendly and unfriendly encounters between himself and his followers and early Mormon settlers in the Utah and Sanpete valleys of north-central Utah (Tyler, 1978:361-362), most notably the highly publicized "Walker War" of 1853. As a consequence of this notoriety, accounts of Walkara's death and burial were widely reported in the newspapers and books (e.g., Burton, 1861:577). According to accounts at the time, Walkara was interred in a great rock slide high in the Pavant Mountains east of Fillmore, Utah. Killed and placed in the grave with Walkara were two of his wives and two Southern Paiute slave children. Fifteen horses were killed at the site and food, rifles, bows and steel-tipped arrows were placed in the grave (Bailey, 1954:168-173).

The grave site of Walkara was apparently visited in 1872 by members of the Wheeler Survey (United States Geographical Surveys West of the One Hundredth Meridian), who collected some skeletal specimens and artifacts (Severence and Yarrow 1879). One of the members of that party, Dr. H.C. Yarrow, later provided the following description of the burial place (Yarrow, 1881:142):

In the summer of 1872 the writer visited one of these rock cemeteries in middle Utah, which had been used for a period not exceeding fifteen or twenty years. It was situated at bottom of a rock slide, upon the side of an almost inaccessible mountain, in a position so carefully chosen for concealment that it would have been almost impossible to find it without a guide. Several of the graves were opened, and found to have been constructed in the following manner: A number of bowlders had been removed from the bed of the slide until a sufficient cavity had been obtained; this was lined with skins, the corpse placed therein, with

weapons, ornaments, etc., and covered over with saplings of the mountain aspen; on top of these the removed bowlders were piled, forming a huge cairn, which appeared large enough to have marked the resting place of an elephant. In the immediate vicinity of the graves were scattered the osseous remains of a number of horses which had been sacrificed, no doubt, during the funeral ceremonies. In one of the graves, said to contain the body of a chief, in addition to a number of articles useful and ornamental, were found parts of the skeleton of a boy, and tradition states that a captive boy was buried alive at this place.

Whatever specimens and artifacts were removed and taken to Washington from this gravesite have never been fully described in print; however, items from two Paiute graves excavated by Yarrow and his associate, M.S. Severance, have been analyzed and published (Metcalf, 1974). These burials, obtained from the Beaver, Utah, area are described later in this paper.

Another early but brief statement on Western Ute burial customs was made by the eminent historian Hubert Howe Bancroft, who noted that in the case of the Utes, usage differed concerning disposal of the dead. "In some parts the body is burned, in others it is buried. In either case the property of the deceased is destroyed at his burial. His favorite horse, and in some instances his favorite wife, are killed over his grave, that he may not be alone in the spirit land" (Bancroft, 1883:144).

In his 1881 monograph on Indian mortuary customs, Yarrow (1881:127-128) also quoted a letter from Dr. A.J. McDonald, physician to the Los Pinos Indian Agency, located southeast of Gunnison, Colorado. This agency, established primarily for the Uncompahgre Ute band, was active between 1868 and 1875 (Vandenbusche, 980:20-24). Since McDonald's description is the most complete one available for the early Eastern Ute, it is quoted below in full.

As soon as death takes place the event is at once announced by the medicine-man, and without loss of time the squaws are busily engaged in preparing the corpse for the grave. This does not take long; whatever articles of clothing may have been on the body at the time of death are not removed. The dead man's limbs are straightened out, his weapons of war laid by his side, and his robes and blankets wrapped securely and snugly around him, and now everything is ready for the burial. It is the custom to secure, if possible, for the purpose of wrapping up the corpse, the robes and blankets in which the Indian died. At the same time that the body is being fitted for interment, the squaws having immediate care of it, together with all the other squaws in the neighborhood, keep up a continued chant or dirge, the dismal cadence of which may, when the congregation of women is large, be heard for quite a long distance. The death song is not a mere inarticulate howl of distress; it embraces expressions eulogistic in character, but whether or not any particular formula of words is adopted on such occasion is a question which I am unable, with the materials at my disposal, to determine with any degree of certainty.

The next duty falling to the lot of the squaws is that of placing the dead man on a horse and conducting the remains to the spot chosen for burial. This is in the cleft of a rock and, so far as can be ascertained, it has always been customary among the Utes to select sepulchers of this character. From descriptions given by Mr. Harris, who has several times been fortunate enough to discover remains, it would appear that no superstitious ideas are held by this tribe with respect to the position in which the body is placed, the space accommodation of the sepulcher probably regulating the matter; and from the same source I learn that it is not usual to find the remains of more than one Indian deposited in one grave. After the body has been received into the cleft, it is well covered with pieces of rock, to protect it against the ravages of wild animals. The chant ceases, the squaws disperse, and the burial ceremonies are at an end. The men during all this time have not been idle, though they have in no way participated in the preparation of the body, have not joined the squaws in chanting praises to the memory of the dead, and have not even as mere spectators attended the funeral, yet they have had their duties to perform. In conformity with a long-established custom, all the personal belongings of the deceased is immediately destroyed. His horses and his cattle are shot, and his wigwam furniture burned. The performance of this part of the ceremonies is assigned to the men, a duty quite in accord with their taste and inclinations. Occasionally the destruction of horses and other property is of considerable magnitude, but usually this is not the case, owing to a practice existing with them of distributing their property among their children when they are of a very tender age, retaining to themselves only what is necessary to meet every-day requirements.

The widow 'goes into mourning' by smearing her face with a substance composed of pitch and charcoal. The application is made but once, and is allowed to remain on until it wears off. This is the only mourning observance of which I have any knowledge.

The ceremonies observed on the death of a female are the same as those in the case of a male, except that no destruction of property takes place in burial of women and of course no weapons are deposited with the corpse. Should a youth die while under the superintendence of white men, the Indians will not as a rule have anything to do with the interment of the body. In a case of the kind which occurred at this agency some time ago, the squaws prepared the body in the usual manner; the men of the tribe selected a spot for the burial, and the employees at the agency, after digging a grave and depositing the corpse therein, filled it up according to the fashion of civilized people, and then at the request of the Indians rolled large fragments of rocks on top. Great anxiety was exhibited by the Indians to have the employees perform the service as expeditiously as possible.

In 1893, Verner Z. Reed, a young amateur ethnologist from Denver summarized burial practices for the Southern Ute groups of southwestern Colorado. He wrote

(Reed, 1980:15-17): "The Utes have great respect for the memory of the dead, and while they erect no permanent monuments, they can remember for long periods the burial places of friends. Their burial customs vary according to the rank and importance of the dead person. If a witch is killed he may be thrown into any hastily dug hole without ceremony. An ordinary Indian will be buried with some state. A horse will be killed over his grave in order that he may take it with him to the Happy Hunting Grounds, and a pipe, a jug of water and a few necessaries will be thrown into the grave. . . If a chief or important personage dies, an elaborate funeral takes place. The women take charge of the funeral ceremonies, and the men, working under their direction, dig a grave, making it about eight feet deep. The grave is then lined with cloths and blankets, and a couch of blankets and robes is built in the grave, a pillow of fine furs being made for the head.

The body, dressed in the best finery the Indian owned when alive, is then passed down to men who stand in the grave, and is placed in an easy reclining position. Tobacco, playing cards, money, meat, fruits, saddles, revolvers and a jug of water are then placed in the grave for the dead man to take with him. . . Rude timbers are then placed in the grave above the body, tanned skins or canvas are fastened to them, and then a wickiup is built over all. Six or seven horses are then killed for the use of the dead man's spirit, and sometimes the wickiup is burned down."

Reed's account of Southern Ute burial practice appears to reflect a shift to excavated graves as a place of interment following establishment of the Southern Ute Agency at Ignacio in 1877. However, the death of Ouray, the famous Uncompahgre Ute chief, at Ignacio on August 24, 1880, was treated in the traditional manner. Ouray died while visiting the Southern Ute Agency and was secretly buried under a rock overhang in an arroyo near the agency (Whittier, 1924; Weigel, 1928, 1930). According to later recorded testimony by members of the burial party, the body was wrapped in new blankets and buffalo robes, then secured by cords and ropes. The body was then placed on a horse and transported to the burial site and interred in the rocky cavern. This cave also contained the burial of Chief Suvata, a Southern Ute. According to the various accounts, horses were killed at the grave site; however, the number of animals sacrificed varies between three (Whittier, 1924:316) and five (Weigel, 1930:188). The fact that Ouray was away from his home and followers at the time of death apparently precluded a more elaborate burial, particularly with respect to his personal belongings and other burial accompaniments. In 1925, the remains of Ouray were removed from their traditional resting place and reburied in the Ignacio cemetery (Weigel, 1928).

Between about 1910 and the late 1930s, several observers, many of whom were trained anthropologists, collected ethnographic data on both the Northern and Southern Ute reservations which dealt in part with burial practices. Some of this information accrued from firsthand observations of post-reservation situations, but much of it was generated from interviews of elderly Ute informants. In the case of the

latter, the intent was to preserve data on the “old ways,” or pre-reservation period. Each of these observations is discussed in a general chronological order as the descriptions appeared in the literature.

In a brief ethnography accompanying a longer discussion of Northern Ute music, Francis Densmore (1922:29) commented that, based on fieldwork conducted in 1914 and 1916, “cave burial was formerly practiced by the Utes. . . A burial ground was visited by the writer which appeared to be still in use. On the burial places were the bones of horses and dogs which, it was said, had been slain at the death of their owners. Clothing was hung above the graves and, in one instance, a quantity of corn was suspended from the branch of a tree.” Densmore also included a photograph of a Ute burial place “in the vicinity of White River Canyon” (presumably the same one described above) which shows scattered horse bones (Densmore, 1922:Plate 36).

At about the same point in time, Robert Lowie (1924) published a review of Shoshonean ethnography based on field observations in 1912. For the Southern Ute, he noted that the practice was to take the corpse to the hills and bury it in the ground. If the deceased owned horses, all but one would be killed at the gravesite except one that was left for the widow. Sometimes no horse was spared. He also observed that the Uintah (Northern) Utes put their dead into ditches, covering up the corpses with dirt and rocks piled on them. Lowie also provided a description of a boy’s burial, as provided to him by a teacher at Whiterocks on the Uintah and Ouray Reservation. The boy, the son of a chief, was placed in a tent near his family’s wooden house when it was learned that his death was imminent. After his death, a grave site was selected in as remote and inaccessible a place as possible. The father had purchased a coffin and the boy’s horse, dogs, saddle, blankets and other property were all assembled by the grave. The property was interred in the pit with him; however, ensuing debate, led by the teacher, dissuaded the burial party from killing the horse and dogs, due to the boy’s own preference prior to his death. The teacher also reported to Lowie that as late as 1912 babies were wrapped up with their dead mothers since it was thought that there was no way of feeding a young child except with the mother’s milk (Lowie, 1924:280).

A few years later, Albert Reagan (1931) published the following description of Northern Ute mortuary customs. Due to its overall representation of early reservation period burial practices, Reagan’s (1931:412-413) discussion is quoted in full.

According to his account: “At the present time, a body is usually kept till the day following death before it is buried, but the writer has been advised that in times past it was buried as soon as possible after death. Before burial, the corpse is washed and then dressed in the best apparel that the relatives can afford. If the family has money to its credit in the local agency office, a suitable coffin is obtained, or a homemade one is made at the local government carpenter shop. Otherwise, it is wrapped in blankets and thus interred. In burial, the corpse is

usually oriented in a north-south line, with head to the north, but this is not always the case. Formerly, and even now, the intimate personal effects are buried with the deceased; while before the coming of the white man, the house where the person died was always burned and all his personal things that were not buried with him were destroyed or killed, including his dog and his horse, after the advent of that beast; and the same is still done in some cases, though these practices have now mostly died out. Eatables and water are then placed on the grave in proper receptacles. If the house is not burned, it is abandoned and its windows and doors removed. While it never serves as a house for a man again, it may often serve as a shelter for stock of the region. This destroying of the personal effects of the deceased accounts for the sacredness of ancient things in the Ute lands, and their being such a poor field for the archaeologist; for everything he possessed with the exception of his scanty pottery and a few milling stones, was perishable and was either destroyed by fire or by mold in the grave.

“From the graves seen, it would appear that in burying the dead in the ancient times, there was no general orientation of the body or position the body was placed in. The thing apparently was to inter it by chucking it in any place where it could be disposed of with the least effort and this was carried out with the handiest things that were convenient. . . It has also been locally reported that they still buried or chucked their dead in crevices and caves along the mesa fronts even after they moved to Ouray. Such burials are reported to have been made in cave-chinks even along the mesa front west of the Duchesne River, two miles west of the government school, it being further asserted that part of a body, with hand extended, is still exposed in one of the chinks in that neighborhood.

“They now have two burial places near Ouray, one east of Green River, about three miles east of the government school, the other on top of the Tertiary mesa, about the same distance north of it. On the burial places are bones of horses and dogs and other domestic animals which the old Indians say were slain at the death of their owners. Clothing and other articles are either hanging about the graves or had been placed directly on them, as had been various kinds of food and water receptacles. Things such as corn and other valued articles used to be suspended from trees and leaning sticks about them; and one grave has had an elaborate enclosure about it which had been roofed, a saddle having been placed on the roof. The writer was further advised that at the time of the burial there, this frame was also variously covered with streaming, odd-lengths of bright-colored goods.”

The descriptions of Northern Ute burial places by Densmore and Reagan are corroborated by J. Monaghan who visited two graveyards in the Uinta Basin in the early Twentieth century. Based on a visit in 1914, Monaghan (1933a:22-23) later described a cemetery near Randlett, Utah, (which was abandoned at that time) in the following manner:

. . . The graveyard is located in the left hand prong of (a) dry deep canyon. It is an extremely out of the way place and the main desire seems to have been to get a location close to the Indian farms but absolutely out of sight from them.

The first thing that is noticeable on approaching the graveyard is the abundance of horse bones bleaching on the red sand. There are some thirty mounds in the rabbitbrush, each about six feet long and two feet high. Some of the graves have been dug and the bodies placed in the graves with baskets and blankets, then a roof of poles or boards has been laid across the open grave and dirt shoveled on top. In other graves the dirt has apparently been shoveled over the bodies. . . Apparently the dead have been buried side by side in two rows with the axis of each mound extending east and west.

Around all the graves are broken and killed cooking utensils and [a] few willow baskets. There are also many pieces of broken china. I inspected these things hoping to find out if possible when the Indians abandoned this graveyard and started using the missionary graveyard [at Randlett]. . . Only parts of the names on the china could be read. I found "Dens " on one piece and "Alfred Meakml " on another and "England, Royal porcelain." On another bit was "Royal Ironstone." On another a picture of a lion with TST in three links below him. "The Reeling Pottery Co.," and "Warrented Goodwin Bros.," was printed on other pieces. "Buffalo 1908" was on one chip. . .

Among the other broken utensils were tin coffeepots, frying pans, all but one of the old fashioned type without the cold handle, dutch ovens, granite stew kettles, and galvanized wash tubs. All these things had been either shot through or had been chopped into with an axe.

Monaghan (1933b:61-62) also visited another graveyard about six miles northwest of Whiterock, Utah, apparently in 1933. This cemetery was a red butte, topped with cedars, rising three hundred feet above the plain. Around the edge of the butte, dozens of graves were observed, marked with a clutter of horse bones and broken utensils. At one grave was an excellent willow water-jar in a bad state of preservation. On another was a little child's cart with solid wheels held to the axles with wooden pegs. At the time of the visit, the graveyard had not been entirely abandoned as there were three fresh graves. Near these were the carcasses of two dead horses killed within less than a week.

A final set of data comes from three ethnographers, each of whom conducted anthropological fieldwork among the Ute in the mid-to late-1930s. These include Anne Smith (Northern Ute, data collected in 1936 and 1937), E.W. Gifford (Southern Ute, data collected in 1935), and Omer Stewart (all Ute groups, data collected in 1937 and 1938). The information obtained by Gifford and Stewart formed part of the extensive fieldwork and informant interviews conducted for the University of California's Culture Element Distribution studies.

Smith's work among the Northern Ute included interviews with elderly informants from each of the former Ute bands who came to be located on the northeastern Utah reservation: the Uintah (which included all of the Utah Utes), the Uncompahgre and the White River Utes from western Colorado. Throughout her analysis, she sought information pertaining to the pre-reservation era, ca. 1845-1880. Smith's findings, relying on the statements of informants, concerning burial practices were stated succinctly: "Burial was in rock crevasses. 'Find a place where there is lots of rocks. Move these rocks and dig until there is just enough space to lay the man out straight. Wrap the body in buckskin, place it in the grave, with the head to the west, then pile on poles and brush, and lots of rocks on top.' An individual's possessions should be burned near the grave. Sometimes they were put in a cedar tree and the tree was burned. A man's horses were killed at the graveside (White River and Uncompahgre). If they saved one horse, they would cut his tail and mane short and make him look like a mourner. A man's tipi was burned (Uncompahgre), but White River informants said this was foolish, because a tipi was hard to make, and they kept it and used it. All said that in time of war a man's weapons would not be burned, but be given to the deceased's father or brother. . . . One woman in 1936 was the subject of criticism, because she had not smashed her mother's set of dishes when the mother died. Her defense was that her mother had given her the dishes before death took place" (Smith, 1974:150-151).

Gifford's work centered primarily on the Apache and Pueblo groups in the American Southwest; however, his informant list included one elderly husband and wife pair, both about 80 years of age, of the Weminuche band (Gifford, 1940). This couple indicated that among their band the dead were carried from the dwelling, wrapped in a blanket, and cremated on a pyre. The deceased's personal property was also burned along with his house. Interestingly, the couple denied knowledge of some traits commonly seen among other Ute groups such as rock crevice burial and animals being killed at the grave site.

The most extensive ethnographic data collected for all the Ute bands was that of Stewart (1942), who also interviewed aged informants to ascertain Ute cultural patterns prior to the advent of European culture in the region. Stewart's data rely upon a presence or absence informant response when asked if a given cultural trait was known to them. The informants included representatives of the following bands: Western Ute — Moanunts (a band formerly located near the Sampits and Pahvants on Figure 63), Timpananunts, and Pahvants; Eastern Ute — White River, Uncompahgre, and Southern Ute (both Mohuache and Weminuche). Stewart's results on Ute death customs are summarized in Table 10.

In summarizing the available published information for Ute burial practices, it can be said that there is a fair amount of secondary data for the period ca. 1855-1935. This information covers the larger Ute subdivisions — the earlier eastern/western and the later northern/southern classifications — as well as pre-reservation and the early

reservation eras. There is enough congruity between the accounts that the basic patterns for Ute burial practices can be accurately established. At the same time, indications that a great deal of variability, both within the former band territories and between bands existed. This variability is well established by Stewart's findings as summarized in Table 10.

As previously discussed, this review of the literature has concerned itself with the technical aspects of Ute mortuary practice, or the actual corpse disposal setting. Within this context, several aspects of burial practice are important for archaeological interpretation of such remains. These ideas may be generated from the foregoing accounts as follows:

1. In general, Ute burial practices appear to have been characterized by expediency and low energy expenditure in regard to selection and modification of interment location. The basic pattern for corpse disposal included: 1) inhumation, usually crevice in pre-reservation times and cemetery in post-reservation times; 2) material goods of functional or utilitarian nature being placed with the corpse or destroyed at the time of burial; and 3) sacrificing of animals, primarily the horse, accompanying the event. While sacrifice of members of the deceased's family is known, written accounts and informant information limits this practice to the Timpananunts band. Also hinted at is the practice of burying young infants with a deceased mother who died before weaning the young child.

2. Dissimilar patterns are apparent by sex in terms of grave goods and associated phenomena. Male interments can be expected to exhibit a wider variety of material items, particularly in the form of typically male-related categories (e.g., horse-related paraphernalia and weaponry). Although not specified in many instances, sacrifice of animals does appear to be exclusively related to male burials. Female burials can be expected to contain generally fewer artifacts and those should be readily identifiable as female-related accompaniments. Categories of items anticipated in both male and female burials include body wraps, clothing, and personal belongings of a utilitarian nature, although, again, the clothing and utilitarian goods should be sex-related. It should be noted, however, that most of the available information for Ute burial practices presently comes from male interments.

3. The burial setting also appears to have been dictated by social status; burials of leaders or chiefs especially can be expected to be more elaborate in nature. An example of this social differentiation was seemingly expressed by the number of horses killed at the grave site. Not expressly noted in the burial accounts but probably real is the idea that horse ownership and subsequent sacrifice of the animals and inclusion of horse trappings in the grave should be both earlier and more common among the Eastern Ute than among the Western Ute bands. The horse was apparently more prevalent among the Eastern Ute, particularly in the last half of the nineteenth century (Smith, 1974; Steward, 1938).

TABLE 10

Ute Death Customs (Stewart 1942:312-313)
includes only those elements pertinent to present study

Culture Elements ¹	Occurrence by Informants ²							
	UN	UU	UP	UT	UC	U1	U2	UW
Corpse removed from house at death	-	+	-	-	-	+	+	-
Left in house, cremated	-	-	+	-	-	-	-	+
Corpse prepared: face washed	+	+	-	+	+	+	-	+
Body washed	+	+	-	+	+	+	-	-
Face painted	+	+	-	+	+	+	+	+
Adorned in best clothes	+	+	-	+	+	+	+	+
Wrapped in blanket, tied	+	-	+	+	+	+	+	+
Corpse carried in hands	-	-	+	-	+	+	+	+
On blanket	+	-	+	-	+	+	+	+
Tied across dead man's horse	-	-	-	+	R	R	+	+
Corpse left exposed on surface of ground	-	+	-	-	-	-	-	-
Spot avoided	-	-	-	-	-	-	-	-
Skeleton buried if seen later	-	+	-	-	-	-	-	-
Burial	+	+	+	+	+	+	+	+
Body extended	+	+	+	+	+	+	+	+
Body flexed	-	-	-	-	-	-	-	-
Head toward east	+	+	-	+	+	+	+	+
Body on side facing north							-	-
In rocks	+	+	+	+	-	-	+	+
Poles across grave covered with bark	+	+	-	+	-	+	-	+
Body free from dirt	+	+	-	+	-	+	-	+
Rock covered	+	-	+	+	+	-	+	+
In pit in cave		-	+	+	+	+	-	+
Any convenient place	-	-	+	-	+	-	+	+
In earth	+	-	-	+	+	+	+	+
In mountains	+	-	+	+	+	+	+	+
In shelter where died							-	-
In dwelling				-			-	-
In trees				-			-	-

Culture Elements ¹	Occurrence by Informants ²							
	UN	UU	UP	UT	UC	U1	U2	UW
Cremation	+	-	+	+	-	-	-	+
Of any deceased, as common as burial	-	-	+	-	-	-	-	+
After death from contagious disease	-	-	-	+	-	-	-	-
Of witches	+	-	-	-	-	-	-	-
Corpse full length	-	-	+	+	-	-	-	+
In house	-	-	+	-	-	-	-	+
In pyre	-	-	-	+	-	-	-	+
On pyre	+	-	-	-	-	-	-	+
Bones buried afterward	+	-	-	-	-	-	-	-
Funeral	+	+	+	+	+	+	+	+
Food and water deposited in grave	+	+	-	+	-	+	+	+
Gifts to deceased	-	-	+	+	+	+	+	+
Placed in grave or on pyre	-	-	-	+	+	+	+	+
Suttee (i.e., wife killed)	-	+	-	-	-	-	-	-
Deceased children and adults received similar treatment	+	+	+	+	+	+	+	+
Personal property of deceased mostly destroyed	+	+	+	+	+	+	+	+
Favorite horse killed at grave	+	-	+	+	+	+	+	+
House burned	+	+	+	-	+	+	+	+
Abandoned	-	-	-	-	-	-	-	-
Moved	-	-	-	+	-	-	-	-
Entire camp moved	-	+	+	-	+	+	+	+
Personal property piled beside corpse	+	+	-	+	+	+	+	+
Implements broken	-	+	+	-	-	-	+	+
Other property burned	+	-	+	-	-	+	+	+
Thrown away	+	-	-	-	-	-	-	+
Relatives take some	+	+	+	+	+	+	+	+
Brothers and sisters only	-	+	-	-	-	-	-	-
Horses distributed to visitors	-	-	R	+	-	-	-	+
Best to close relatives	+	-	R	+	+	+	+	+

¹ Informant responses

+	Element present
-	Element absent or denied
Blank	Question not asked
R	Recent, usually post-European

² Informant band affiliation

UN	Moanunts	UC	Uncompahgre
UU	Timpananunts	U1	Mohuache
UP	Pahvants	U2	Mohuache
UT	White River	UW	Weminuche

4. Also gleaned from the literature is the fact that items of European origin, including the horse, horse gear, weapons, assorted metal artifacts, and ornaments (especially trade beads), should be fairly common in the early Ute burials dating to the late nineteenth and early twentieth centuries, as opposed to artifacts of a more aboriginal nature. Such items appear to have been generally widespread throughout the Ute culture area as a result of trade and other forms of acquisition.

5. With regard to change in burial practice, the primary difference through time seems to be related to the nucleation of the Ute bands on the present day reservations and the attendant advent of cemeteries. For the Northern Ute, the patterns of animal sacrifice and the placing of personal goods in the grave and/or destruction of belongings continued into the mid-1930s. Unfortunately, no written accounts are available for burial practices after that time nor are there any accounts of reservation era burial practices available for the Southern Utes. It should be possible through the collection of present-day informant data to document changes in, or the continuance of, such patterns beyond the 1930s for both Northern and Southern Utes.

6. Finally, the written accounts provide contextual information for expanding the archaeological record for pre-reservation Ute burials throughout the region once inhabited by the Ute. Simply put, Ute burials should not be expected to be co-located with habitation or other more limited function sites. As will be seen in the next section, not a single Ute burial has been located as a result of an archaeological survey, rather all have come to light as a result of fortuitous discovery by nonprofessionals. Sadly, this situation has led to a general lack of good primary data. Moreover, as Reagan (1931) observed, the locations and types of burials has left a limited record available for the archaeologist and physical anthropologist. Thus, it is imperative that critical data be adequately collected and analyzed from newly discovered Ute burials.

As will also become apparent, there is currently little or no archaeological information available for some of the different types of burials as elucidated by Stewart (1942) and other observers, such as cremations. Of interest is the apparent total lack of historic documentation for Ute tree or platform burials. The presence of platform burials is common in modern-day folklore in western Colorado and is still referred to in popular accounts of Ute lifeways (e.g., Marsh, 1982: 13,168); however, no ethnographic or archaeological evidence exists which supports the presence of this practice among the early Ute. More likely, the tree platforms which have been found functioned as hunting, observation, or storage features. Also hinted at by one of Stewart's (1942) informants was the leaving of corpses exposed on the ground surface. Although apparently limited in practice, there is one historic account of such an occurrence. Following an attack on a Ute encampment by local cowboys near Dolores, Colorado, in 1885, several corpses were left on the ground when the Utes refused to bury them (Forrest, 1970:11). Presumably this example may have been more related to the incident itself and not common practice.

ARCHAEOLOGICAL DATA

Pre-reservation period Ute burials are rather scarce, considering the extent of the former Ute homelands; less than twenty definitely Ute specimens have been identified from the existing literature and in collections. Unfortunately, a large majority of these known burials has never received adequate analysis and, in many cases, pertinent information regarding precise location and context is pitifully incomplete. Thus, there is a clearcut need for additional primary data regarding Ute burials and practices such as that presented in this volume.

Each of the identified Ute burials is discussed in the following paragraphs; Figure 65 illustrates their locations, as taken from the literature or museum accession records. It is not possible for any of the examples to state with certainty the band affiliation; however, it can be assumed that each burial is probably associated with the former band which inhabited that particular area.

Colorado Ute Burials (Numbers conform to burial locations on Figure 65)

1. *Meeker Skeleton*. This specimen was first reported as an accession to the Colorado Historical Society's collections in 1927 (Anonymous, 1927:196) and later examined by E.B. Renaud of the University of Denver (1941:21-23). The burial was that of an adult male (probably White River Band, based on location), which Renaud believed to have died between 1860 and 1880. The bones of five horses were found over the grave (type not specified), leading to the supposition that the remains may represent those of a chief. Burial accompaniments included a Henry carbine, copper wire bracelets, a broad leather belt studded with copper buttons, saddle rings, a knife sheath, and small white beads. This burial is presumably still in the Society's collections, but it does not appear in a recent inventory of their osteological remains (Hummert, 1981).

2. *La Veta Skeleton*. This burial was recovered in 1932 by Renaud (1933:41-44, 1941:18-21), from a pass, once crossed by a Ute trail, south of the town of La Veta. The burial had been made in a broad crevice of a large boulder and covered with small rocks and contained the remains of a middle-aged male (possibly Mohuache). Non-osseous items collected included many glass beads, a flintlock gun (date 1848), three metal arrowpoints, a saddle buckle, five saddle rings, one piece of copper, a spoon, and a stone pipe. The skeleton is currently in the collections at the University of Denver (Turner, 1960:14).

3. *Monte Vista Skeleton*. This burial, located near the southwest edge of the town of Monte Vista, was excavated in 1982 under the direction of then Colorado State Archaeologist Emerson Pearson. The interment was that of a female, who was in her late teens at death, probably of either Mohuache or Capota affiliation. The corpse had been placed beneath a crevice formed by a large slab of rock which had previously spalled away from a cliff face, with the body extended and lying on its side. The only

squaw . . . The lower edges of the two graves merging into each other. The southwestern cover above was opened, and the same characteristics of structure discovered as in Nos. 959 and 964; cedar boughs supporting the rocks and enclosing the open space in which the skeleton was found. The body lay on its right side, with knees slightly bent and feet pointing in a NW direction. Decomposed clothing, an old gunbarrel fallen from its stock, a bridle-bit of Spanish make, several bullets, a cloth containing a mass of red paint, and other relics were found near the skeleton. (Severance, 1873:1-6)

Metcalf's analysis and descriptions of the artifactual material are thorough and serve as a good statement on historic aboriginal objects and trade goods for this area. While a complete review of his findings is not germane to the present study, there are some points of importance which add to the discussion by Severance. For example, Metcalf notes that there are several items in the Wheeler collection (which is in the Smithsonian Institution) that are not specifically listed by Severance, (although he does indicate the recovery of unitemized objects with both burials). These items include: 1) an iron arrow point; 2) elk antler saddle bows; 3) a powder horn; 4) parts of four guns (the barrel listed by Severance is missing from the collection); 5) a razor blade fragment; 6) a fragment of a flat file; 7) a metal awl; 8) a horn comb fragment; 9) 12 brass wire bracelets; and 10) bits of bead embroidery. Although it is apparently impossible to determine which articles are from which grave, it would seem probable that numbers 1-5 were associated with the male; the remainder could have come from either burial. Metcalf (1974:3) also observes that "Much of the material recovered appears to have been in poor condition when it was placed in the graves. Gun locks and a fragment of a rifle stock as well as other gun parts seem to have been deposited as parts and there is nothing to suggest that a complete gun had been present." He further states that there is indeed a nickel American one-cent piece in the collection which bears a date of 1861. The coin has been perforated for use as an ornament and would appear to be one of the coins Severance thought had been stolen. If this coin is one of those specimens, then bracket dates of at least 1861 and 1872 can be established for the female and infant burial.

The crania of the Southern Paiute burials recovered by Severance were also reported in 1927 by Ales Hrdlicka (1927:94-100), along with several other purported Shoshonean crania. Hrdlicka's report, however, only includes observations on approximate age of the specimens, presence/absence of cranial deformation, and numerous measurements of the skulls.

20. *Gosiute Burials*

Elmer Smith (1940:64-68) has provided a brief description for two post-Caucasian Gosiute burials, both excavated by him from the vicinity of Ibapah in extreme west-central Utah. These burials were described as follows:

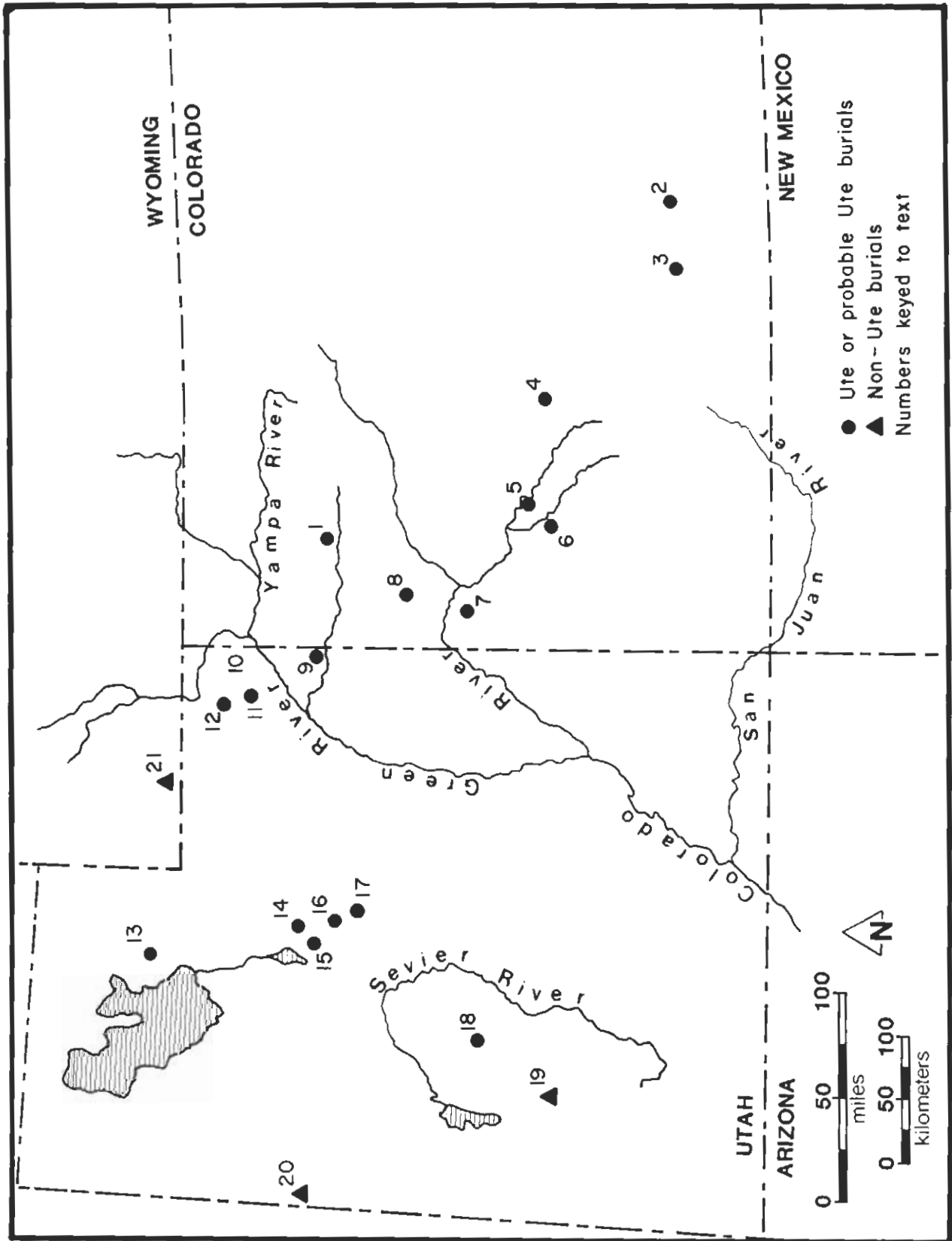


Figure 65 — Distribution of known Ute and non-Ute burials discussed in the text.

artifacts recovered were numerous beads, tentatively dated to the latter part of the nineteenth century, and a bent iron ornament in the form of an exaggerated question mark. The ornament was inferred to have been a pendant for a bead necklace.

The burial had previously been disturbed by the landowner and it is not known if other artifacts were once present. Upon completion of the excavation, the recovered artifacts were left with the landowner and the osseous remains went to the Colorado Historical Society. At the time of this writing, the skeleton is undergoing analysis by Michael Hoffman at Colorado College.

4. *5SH99: Cochetopa Dome Skeleton.* This burial was also excavated in 1982 although the process was less than satisfactory due to the overzealousness of a county coroner who during the investigation period, which lasted several months, disinterred the human skeleton without archaeologists present. Nonetheless, the remains have been thoroughly analyzed (Scott, Hoffman, and Hammer, 1983). The burial was located on the west-facing flank of Cochetopa Dome, a volcanic intrusion situated a few miles north of the old Los Pinos Indian Agency. The remains were those of a male, 30-40 years old at death, who had been placed in a wide bowl-shaped crevice in a rock outcrop on his back in an extended position with the body oriented roughly head to east and feet to west. The corpse had probably been covered with dirt and pine duff. Eleven artifacts, representing three items placed with the body, were recovered, including a white glass button, a saddle of native manufacture, and a sea shell. The saddle fragments included six wooden pieces (probably aspen) of the saddle frame and three fragments of the saddle rigging, comprised of two commercially tanned leather straps and a cinch ring. The shell was a crown couch (*Melongena* sp.) which had been drilled in the spire. This type of couch is native to the shores of the Gulf of Mexico from Texas to Florida. Based on the meager artifact collection and Ute history for the area, the burial was thought to date between 1830 and 1881. The human and artifactual remains will be curated by the Colorado Bureau of Land Management.

5. *Black Canyon Skeleton.* A Ute burial was located in the 1930s by a ranger at the Black Canyon National Monument, about ten miles northeast of Montrose (Huscher and Huscher, 1939:142-143). The remains were those of an adult male that had been placed beneath a large sandstone slab which had spalled from a cliff, then covered with smaller rocks and possibly dirt. No artifacts were reported with the burial, but horsebones were scattered about the gravesite. The burial most certainly predates 1881 when the Uncompahgre Utes were removed from the area. It is believed that the human skeletal remains from this burial are curated at the Denver Museum of Natural History.

6. *Uncompahgre Skeleton.* In the collections of the Colorado Historical Society is a nearly complete skeleton of a Ute male about 35 years old (accession No. 07362) (Humert, 1981:22-24). This burial was found in the vicinity of Montrose in the mid-1940s, but its exact location and burial context are unknown. The skeleton was

reportedly found by Montrose County Sheriff Arthur Sutton who forwarded the remains to the Federal Bureau of Investigation where they were examined by the physical anthropologist T.D. Stewart and then returned to Colorado (Hoover, 1946). Also found with the burial and forwarded to the FBI was a rusted rifle of the so-called "Kentucky" or "Indian" percussion type. It was not possible from an examination of the submitted parts to identify the gun as to its manufacture.

7. *Glade Park Skeleton*. This burial, also an adult male, was found in a rock crevice in Glade Park, about 30 miles southwest of Grand Junction, in either 1928 or 1929 (Woodbury, 1930). The burial was discovered and excavated by a local rancher and sent to the Colorado Historical Society for study. The corpse had been placed in a niche in the rocky wall of a small canyon, with the body placed in an upright position, knees drawn up against the chest. The whole body was turned so as to face west. The opening of the niche had been covered with stones and dirt. No burial goods were recovered; however, Woodbury (1930:232) believed the burial circumstances and well preserved condition of the bones indicated probable Ute affiliation. The present location of these remains has not been ascertained. As noted, they were sent to the Colorado Historical Society for examination, but the specimen does not appear in a recent inventory of that society's osteological collections (Hummert, 1981).

8. *5RB761: Douglas Creek Skeleton*. Another possible Ute burial was excavated from the Douglas Creek area between Grand Junction and Rangely in 1977 (Creasman, 1979:III 11-14). The investigators presumed the remains to be prehistoric in age, and they may well be. However, the burial situation conforms more to a Ute type than the earlier Fremont. The body had been placed in a small niche created by a large rock spall in a flexed position with the legs lying above the upper torso. The head was resting slightly on the right side, facing to the southwest. Artifactual material found with the burial included four small pieces of cord and four small pieces of hide. Of interest to cultural affiliation of the burial is the presence of a large rock art panel above the interment niche which includes historic Ute pictographs in the form of horse-mounted anthropomorphs. Thus, a combination of burial type and the associated rock art would appear to favor a Ute affiliation. The skeleton, fragmentary in nature, appeared to be that of an adult female. The remains are presumed to be in the collections at Colorado State University, the institution which conducted the work.

Utah Ute Burials (Numbers conform to burial locations on Figure 65)

9. *White River Skeleton*. In 1956, an adult Ute male burial was located about two miles above the Bonanza bridge in east-central Uintah County. The skeletal remains were turned over to the Dinosaur Natural History Museum in Vernal (accession No. 275), along with remains of a saddle, bridle, basket water jug, moccasins, and other unidentified articles. The remains were returned to the Uintah and Ouray Utes in February of 1963 for reburial.

10. *Vernal Museum Skeleton*. The records at the Dinosaur Natural History Museum contain information on another Ute burial, the original location of which is undetermined, but is presumed to be from the Uinta Basin. The remains were that of a young boy buried in a bent knee (flexed) position, dressed in a linen shirt, leggings, and moccasins. A percussion cap rifle was found with the burial. The burial was estimated to be about 100 years old. At first, the burial was thought to be in the museum's collections, but subsequent checking failed to locate it. It may be at the Utah Museum of Natural History in Salt Lake City.

11. *42UN1225: Pariette Skeleton*. This burial is described in the present volume.

12. *42UN962: Roosevelt Skeleton*. This burial was discovered during road construction in 1980 about three miles east of Roosevelt (Lindsay and Neily, 1980). The gravesite was greatly disturbed but apparently it was an open, pit burial, located on the east edge of a small knoll on the Nephi Bench. The landowners had been told of the burial about 65 years prior to its accidental discovery. Associated artifacts were numerous, including fragments of a burial robe (cloth and string), assorted beads, glass, a plate, a belt, shoes, worked bone, large mammal teeth, and crockery fragments (dated 1877). The human remains were not aged or sexed, but they appear to represent an adult, probably female based on the artifactual materials. The remains were reburied.

13. *Ogden Skeletons (University of Utah No. 10786 and 10788)*. Two skulls, both probably male, were unearthed by school children in 1931. They came from a natural rise one block south of the Weber County High School in Ogden (Reed, 1966:143). Found associated with the human remains were a steel knife, leather straps, beads, and abalone.

14. *Spanish Fork Canyon Skeleton (University of Utah No. 24286)*. A nearly complete historic period Ute burial was collected from rocky talus in Spanish Fork Canyon during 1965 (Reed, 1966:134-136, 152-153). The burial, an adult male about 37 years old, was accompanied by artifacts of "middle nineteenth century types, including brass buttons and other brass objects, a leather pouch, and a "Kentucky" rifle.

15. *42UT225: Salem Skeletons*. Three fragmentary burials are included in this group of remains, found east of Salem (Reed, 1966:136-138) at the foot of a rock slide in Water Canyon. 42UT225-1 consists of a skull, fully adult, probably not elderly, undoubtedly male, found in association with objects of the nineteenth century type. According to the site file data for 42UT225, the artifacts included charcoal, rotted wood fragments, a ball and cap rifle, knives, metal arrow points, buttons, lead balls, leather straps and shoes, metal pails, and other unspecified objects. Skull 42UT225-2 is a juvenile, probably about 15 years of age and is accompanied by a fragment of an infant frontal.

16. *Indianola Skeleton (University of Utah No. 23649)*. This burial, found in 1953 near Indianola by a group of local boys, was accompanied by bullets, pieces of a gun (a heavy percussion-lock, octagon-barreled rifle), iron tools, glass and brass beads, miscellaneous textiles, and buckskin fragments (Reed, 1966:132-134). The human remains consist of an adult male cranium. The locality, in the Sanpete Valley near the center of Utah, is in the historic territory of the Pahvant band.

17. *Sanpete Valley Skeleton (University of Utah #24287)*. The skeleton of a female was acquired by the University of Utah in the early 1960s. It came from a cave or cleft in the Sanpete Valley without specific associations. Age at death was determined to be close to 27 (Reed 1966:143, 155-156). Reed (1966:146, 157) also provides a discussion of another female skull from Nephi under this accession which he also believed to be a probable Ute.

18. *Kanosh Skeleton (University of Utah #10861)*. Reed (1966:140,143) also discusses a cranium of a "post-Caucasian" putative Ute burial from the lava beds west of Kanosh in former Pahvant Ute territory, which he believed to be that of a female. This burial was originally described by Julian Steward (1936:56) who had assigned a historic period designation; however, the earlier report did not provide support for that designation nor did it provide any details regarding the archaeological context.

Nineteen adult Ute burials have been discussed, although many consist of scanty remains or are characterized by limited information. As a result of the poor overall quantity of data, derived conclusions must be viewed as also being potentially incomplete. On the other hand, the information that is available for the burials appears to be valid and is, therefore, useful in characterizing early Ute burial practices.

Table 2 provides a summary of the more salient burial data. Among the nineteen individuals there are 15 males and 4 females. All are believed to date to the last half of the nineteenth century based on burial artifact assemblages and each is thought to be pre-reservation, with the possible exception of the Uinta Basin specimens which could be early reservation. All are primary inhumations. In the 12 examples for which burial context is known, all but one are crevice burials; the exception is the female of 42UN962 which was a pit burial located in the open. Eight of the 11 crevice burials are males. Data for body position is limited as only four have been described as having been flexed while another two were extended.

In terms of pre-reservation affiliation, all of the Colorado burials are probably Eastern Ute, the four Uinta Basin specimens could be either Eastern or Western, and the remainder of the Utah burials are undoubtedly Western Ute. As hypothesized earlier, the data reveal that horse sacrifice and horse trappings are more common in the Eastern Ute burials, although much of the Utah burial information is incomplete. Also as expected, there are marked differences among grave goods and associations according to sex. This includes abundance and variety of items as well as the occur-

rence of sex-related artifacts. Male-only accompaniments include horse gear, weapons, pipes, and shells; no categories of grave goods were exclusive to female interments (Table 11).

Grave goods are predominantly European-manufactured or European-influenced items, gained either through trade, government issue, or warfare with neighboring groups. Probable aboriginal trade items include Navajo blankets and sea shells. Interestingly, only two shells occur in the data — one comes from the California coast, the other from the Gulf of Mexico. None of the burial assemblages stands out as being overly elaborate and thus indicative of higher status. In each case the burial assemblage probably reflects personal property of the deceased. In contrast, some of the burials either contain minimal items or no artifact assemblage at all. Of importance to late nineteenth century Ute lifeways, the burial accompaniments represent a good source for information related to material culture studies and trade. Much of this material has not been properly analyzed and since the various items are presumably curated in regional museums there is potential for study of these artifacts which, when combined with material culture items of native manufacture collected from the Ute in the last half of the nineteenth century (e.g., Fowler and Matley, 1979), could substantially increase our knowledge of Ute material culture for that period.

NON-UTE DATA

It might be expected, based on the idea of common ancestry, that all Shoshonean groups in the Great Basin and adjacent regions would share many traits with regard to burial practices. Although a thorough literature review was not conducted on this topic as part of the present study, it can be generally stated that indeed many similarities are apparent in the ethnographic data and that this concordance in traits is strongest among geographically neighboring groups. To illustrate this similarity in burial practices, there are three fairly well described or known burial situations in the literature for neighboring, linguistically related groups which can be reviewed. These examples include Southern Paiute (Metcalf, 1974), Gosiute (Smith, 1940), and a possible Eastern (Wind River) Shoshone burial which has only recently been discovered. Each of these cases is described below; the locations are indicated in Figure 64, with the text numbers keyed to the figure locations.

19. *Southern Paiute Burials*

Two Paiute burials, including three individuals, were excavated and collected by the aforementioned Wheeler Survey party in 1872 near Beaver in southwestern Utah. The burials were originally described by Mark Sibley Severance (1873) and, about a century later, the associated artifacts were analyzed and reported by George Metcalf (1974). Severance's description, as cited by Metcalf (1974:2-3), is quoted as follows:

TABLE II

COMPILATION OF UTE BURIAL ELEMENTS

Burial Name	Text/Map Reference No.	Sex ¹	Burial Type ²	Body Position ³	Burial Accompaniments										
					Horse Bone	Saddle	Other Horse Items	Body Wrap	Clothing	Ornament	Weaponry	Utilitarian Items	Pipe	Shell	
COLORADO															
Meeker	1	M	U	U	●		●		●	●	●				
La Veta	2	M	C	U	●	●				●			●		
Monte Vista	3	F	C	E					●	●					
5SH99	4	M	C	E		●			●					●	
Black Canyon	5	M	C	U	●										
Uncompahgre	6	M	U	U											
Glade Park	7	M	C	F											
5RB761	8	F	C	F					●						
UTAH															
White River	9	M	U	U		●			●						
Vernal Museum	10	M	U	F					●						
42UN1225	11	M	C	F					●	●			●		
42UN962	12	F	OP	U					●	●					
Ogden (2)	13	M	U	U						●				●	
Spanish Fork	14	M	C	U					●				●		
42UN225	15	M	C	U					●	●					
Indianola	16	M	U	U					●						
Sanpete	17	F	C	U											
Kanosh	18	M	C	U											

Notes: 1. M - Male
 F - Female
 2. U - Unknown
 C - Crevice
 OP - Open Pit
 3. E - Extended
 F - Flexed

Museum Mark. No. 959 and No. 964

Cranium — with apparently perfect skeleton? of a papoose, from a rock-grave, Beaver, Utah. On a hillside east of Beaver . . . is a collection of Indian graves of recent construction, half way up from the plain on which the town lies to the top of a barren hill, of volcanic nature. These graves are formed of vast piles of lava rock, heaped to great size . . . They were mere piles of irregular stones thrown together . . . A growth of stunted cedars covered the sidehill . . . and supplied the material for a party of their interior construction. . .

The first grave opened was about (10) feet long, 8 feet wide and 6 feet high, with the longitudinal axis pointing north and south, and the general rounded form of a high mound. Two feet below the top, was found a layer of cedar trunks and boughs, somewhat regularly placed, inserted in the side of the grave and supporting the superposed, which were of various sizes . . . A space of about 6 ft. long, 4 ft. broad, and 4 ft. deep had been left below these cedar trunks, and in this were found the two skeletons . . . of a papoose and squaw respectively. A buffalo robe enveloped the skeletons, which still retained much of the clothing in which they had been buried. Around the skeletons, outside of the buffalo robe, was a heterogeneous collection of tin pans, tin cups, knives, forks, spoons, blankets and other articles of domestic use, with the typical looking-glass and carefully disposed piece of vermilion . . .

The skeleton of the squaw lay underneath, on its back with the feet pointing nearly directly to the west, and the head slightly declined on its left side . . . The covering . . . of the squaw had mostly fallen to decay, while that of the papoose was comparatively well preserved.

The papoose . . . lay, lightly swathed in a wicker hood on its back on the breast of the squaw, with the feet pointing westward . . . A neat little pillow, six (6) inches by four (4) and about an inch thick, lay under its head, within the hood. A checked cotton shirt, blue and white, covered its body and a red flannel blanket . . . enwrapped the whole skeleton. A string of blue and white beads was about the neck, with a couple of nickel cents suspended on a string . . . this small coinage was stolen from the hood, as it lay outside my tent door in Beaver — my impression is that one of the cents have a date of 1856, so recent a date that the story of the Mormons, to the effect that the skeletons were those of Pah-utes . . . appears entirely worthy of credence.

Cranium, with part of the skeleton, of a Pah-ute brave . . . The Mormons give Nabbynuckh as his name . . .

The rock-pile from one end of which the skeleton was taken was about twenty-five (25) ft. long, twenty (20) ft. broad and ten (10) ft. high, with longitudinal axis pointing NNE. It lay . . . about five (5) ft. above the grave of the papoose and

squaw . . . The lower edges of the two graves merging into each other. The southwestern cover above was opened, and the same characteristics of structure discovered as in Nos. 959 and 964; cedar boughs supporting the rocks and enclosing the open space in which the skeleton was found. The body lay on its right side, with knees slightly bent and feet pointing in a NW direction. Decomposed clothing, an old gunbarrel fallen from its stock, a bridle-bit of Spanish make, several bullets, a cloth containing a mass of red paint, and other relics were found near the skeleton. (Severance, 1873:1-6)

Metcalf's analysis and descriptions of the artifactual material are thorough and serve as a good statement on historic aboriginal objects and trade goods for this area. While a complete review of his findings is not germane to the present study, there are some points of importance which add to the discussion by Severance. For example, Metcalf notes that there are several items in the Wheeler collection (which is in the Smithsonian Institution) that are not specifically listed by Severance, (although he does indicate the recovery of unitemized objects with both burials). These items include: 1) an iron arrow point; 2) elk antler saddle bows; 3) a powder horn; 4) parts of four guns (the barrel listed by Severance is missing from the collection); 5) a razor blade fragment; 6) a fragment of a flat file; 7) a metal awl; 8) a horn comb fragment; 9) 12 brass wire bracelets; and 10) bits of bead embroidery. Although it is apparently impossible to determine which articles are from which grave, it would seem probable that numbers 1-5 were associated with the male; the remainder could have come from either burial. Metcalf (1974:3) also observes that "Much of the material recovered appears to have been in poor condition when it was placed in the graves. Gun locks and a fragment of a rifle stock as well as other gun parts seem to have been deposited as parts and there is nothing to suggest that a complete gun had been present." He further states that there is indeed a nickel American one-cent piece in the collection which bears a date of 1861. The coin has been perforated for use as an ornament and would appear to be one of the coins Severance thought had been stolen. If this coin is one of those specimens, then bracket dates of at least 1861 and 1872 can be established for the female and infant burial.

The crania of the Southern Paiute burials recovered by Severance were also reported in 1927 by Ales Hrdlicka (1927:94-100), along with several other purported Shoshonean crania. Hrdlicka's report, however, only includes observations on approximate age of the specimens, presence/absence of cranial deformation, and numerous measurements of the skulls.

20. *Gosiute Burials*

Elmer Smith (1940:64-68) has provided a brief description for two post-Caucasian Gosiute burials, both excavated by him from the vicinity of Iapah in extreme west-central Utah. These burials were described as follows:

University of Utah Museum No. 18424 (Site U-159). This burial was that of an adult male who had been interred in an excavated pit in the bottom of a small gully. According to Smith's (1940:64) description:

The grave was 67 inches deep, 102 inches long and 34 inches wide. After the body had been placed on its back with the knees slightly drawn up, cedar poles had been placed directly above the body . . . The poles were set horizontally into the sides of the grave to a depth of 6 inches. Over the first level of poles, rocks and dirt were placed, over this another level of poles then a layer of dirt and rocks, and last another layer of poles and over this a thick layer of dirt and rocks . . . The arms were crossed near the wrists and were lying in this position on the upper frontal part of the pelvis, evidently having been put across the dead man's stomach at the time of burial. The skeleton proper was 4 inches lower than the skull, showing that the bottom of the grave had sloped somewhat down hill. The grave was oriented northeast by southwest. The head was up hill to the southwest.

At the time of excavation, the clothing around the burial had not completely disintegrated as there were remains of overalls on the leg bones and overall buttons. A pair of "old fashioned" white-buttoned brown shoes were found on the feet. Near the right leg was a small bundle wrapped in neatly cut strings of blue woolen cloth. The bundle contained a large amount of small seeds (species not given), a pair of iron rimmed spectacles with the lens broken, cotton cloth of a loose knit, and a large number of white buttons. A gun barrel of "a late pioneer type" was also included in the grave.

University of Utah Museum No. 18425 (Site U-159A). The second burial was located about a mile from the first, also in the bottom of a small drainage. Contained in the grave was the body of a female, aged 30-35 years at the time of death. The grave itself was located near a cedar tree from which a number of branches had been cut, and over the surface of the grave were scattered cedar logs and branches to a height of three feet. In contrast to the other burial, the grave was a pit, 29 inches deep, 36 inches wide, and 48 inches long, without the cedar logs placed across the excavated grave. The body was lying on its right side, facing northwest, with a northeast-southwest orientation with the head to the former direction. The body was fully flexed.

Found with the body were two tin pans, a dutch oven, all near the top of the grave, leather straps, and a large wooden-handled butcher knife. Five tin cans were found mixed with the logs over the grave. The body itself showed evidence of having been wrapped in burlap. The dutch oven and tin pans showed evidence of deliberate destructive activities and charcoal and ash were mixed with the scattered bones as if some item or items had been burned at the time of burial.

21. *Wind River Shoshone (?) Burial*

In September of 1983, a historic period aboriginal burial was discovered and unearthed by vandals in Uinta County, southwestern Wyoming. The burial, consisting of an adult male body and numerous accompanying artifacts, was subsequently reclaimed by the Bureau of Land Management, on whose land the burial site exists. Visits were made by BLM personnel to the site to record it and to retrieve any additional cultural materials. The burial items have not yet been fully analyzed; however, the following information has been supplied by the BLM Salt Wells Resource Area office in Rock Springs.

The site, designated 48UT886 in the statewide survey, is located near the west rim of Sage Creek Mountains. The interment had been placed in a horizontal crevice in the rimrock above a steep slope. Axe-cut juniper boughs apparently covered the grave. Preliminary analyses of the artifacts place the date of the burial at about 100 years ago and the remains are presumed by this writer to be Wind River Shoshone, based on location and the former distribution of that group and conformity with Wind River Shoshone burial practices (e.g., Lowie, 1924:282). The possibility has been raised that the cultural affiliation may be other than Shoshone, specifically Cheyenne or Arapahoe; but this evaluation is based solely on moccasin beadwork which has been reviewed in photographs by experts in Plains Indian artifacts. While the cultural affiliation remains in doubt, it can be pointed out that there is a fragment of a Navajo blanket with the burial as well, meaning that in theory the burial could be that of a Navajo. It is, of course, not Navajo, the point being that it is tenuous to assign cultural affiliation based on a single artifact. Finally, the area in which the burial was found was noted by Shimkin (1947:267) to have been a primary habitation area for the Wind River Shoshone, being annually frequented during the summer months while exploiting the availability of various floral and faunal subsistence resources. On the other hand, the historic intermingling of the Shoshone and other plains Indian groups has in the past made ethnic identification of post-contact burials impossible in western Wyoming (Gill, 1976; Nichols, 1970) and, hence, a measure of doubt must remain as to the correct affiliation of the burial from 48UT866.

Artifacts associated with the body are numerous. Weaponry included a .22 caliber revolver, .45-70 Springfield rifle cartridges, and a knife and sheath. Horse gear was present in the form of a manufactured stock type saddle, with a leather rifle scabbard with sheepskin fleece lining, bridles, and other fragments. Several types of glass and brass beads were present, including beaded moccasins. Other ornaments include a number of elk teeth beads, a bracelet, a military button, leather buttons, and two metal conchas. In addition to the moccasins, clothing is represented by several print fabric pieces, including a portion of the shirt *in situ* on the upper torso, and a leather belt once covered with beadwork. There were also fragments of a print cotton kerchief, woolen blanket, and a Navajo blanket.

As anticipated, the neighboring non-Ute burials examined exhibit marked similarities with the Ute ethnographical and archaeological data. Obvious correlations include grave locations, differentiated male and female burial accompaniments, property destruction at the time of interment, and a predominance of European or European-influenced grave goods. Of those reviewed, the probable Wind River Shoshone burial from southwestern Wyoming most parallels the Ute pattern; however, any of the three could be easily considered as Ute had they been found in the region formerly occupied by the various Ute bands.

CONCLUSIONS

A review of the ethnographical and archaeological data extant for Ute burial practices has been undertaken to pull together this information and to provide a background for future analyses of such remains. The review has shown that while there is a fair amount of information regarding the general process of interment among the early Ute, there are also significant gaps in the database, especially for primary data. Since Ute burials are still being located, it is imperative that full and adequate study be made of these remains and associated phenomena. There is much to be learned not only about actual burial practices as discussed in this effort but also about Ute funerary customs in a broader context, age-sex and social differentiation, population biology, demography, material culture, and interrelationships with both Caucasian and other native populations.

In terms of additional study, a fascinating topic for research would be continuities and changes in pre-reservation burial practices, as seen from the ethnographical and archaeological record for the pre-1880 period, which have occurred since the establishment of the present-day reservations in southwestern Colorado and northwestern Utah. Of particular interest would be the persistence of traits into the post-reservation era. It has been noted, for example, that horse sacrifice was still being practiced on the Uintah and Ouray Reservation in the mid-1930s; however, information related to its continuance beyond that time is lacking. With regard to post-reservation times, it should still be possible to document secular change in both ritual activities associated with death and aspects of corpse disposal.

SUMMARY & CONCLUDING REMARKS

The crevice burial from Pariette Draw represents one of only a handful of ethno-historic burials reported from Utah and is one of only a few professionally studied on the Colorado Plateau (Hand and Gooding, 1980). Not until now has any study been as thorough as the present one. Crevice burials themselves, although not that uncommon in traditional Shoshonean ethnographic contexts, are excellent subjects for study due to their state of preservation. The threat of vandalism provided the impetus to study the Pariette burial and compare it to local, traditional Ute customs, traits and burial practices in a frontier, Euro-American, 19th century spatial framework.

Designated 42UN1225, the Ute burial site near Ouray, Utah, is situated in a sparsely vegetated badlands environment not unlike other areas of the Uinta Basin. The burial was located in a crevice of a sandstone monolith adjacent to the Uintah and Ouray Indian Reservation. After field examination, it became apparent that removal was the best preservation course.

Complete on-site excavation was not possible due to the restricted nature of the crevice. This became a fortuitous opportunity for it allowed the burial bundle to be removed, intact, to a laboratory for greater control, closer analyses, and unobstructed examination.

The body was wrapped in a tanned and painted buffalo robe and was accompanied by numerous articles of clothing and textiles; horse trappings; an axe; a clay pipe and marble; and ornamentation including beads, beaded moccasins, leggings and a vest, a hair plate and assorted brass buttons and tacks. The individual wore a striped, placard style, cotton shirt, a strand of beads, moccasins and probably a beaded vest. No direct evidence for pants or a breech-cloth were found; however, it is possible that one of the fragmentary textiles served that purpose. Three braids were accompanied by a hair plate and associated brass buttons. The skeletal material was semi-articulated, particularly in areas of the head, chest, right forearm and hand, those areas not vulnerable to exposure or pack rat disturbance. The skeletal remains of a horse were located down slope south of the monolith, suggesting the practice of killing the owners horse, a common Shoshonean ethnographic tradition, was practiced here also.

Final analysis showed the individual to be a male, 27 to 30 years of age and about 5'8" tall. There was no indication of trauma or injury and at first glance the skeletal material appears to reflect a healthy person. Closer analysis, however, shows possible evidence for infectious tuberculosis. A date of 1860 to 1870 for burial is posited with interment prior to onset of rigor mortis or after its subsidence several days later; the season of death is unknown. A special status can be suggested due to the volume of materials found with the body and the thorough preparation and care given the deceased; the degree of status remains unknown. The artifacts are of Euro-American

manufacture except for the buffalo robe, a Navajo textile, some tanned leather, and the beaded articles. Trade and/or assimilation of ideas out of other ethnographic contexts is apparent in the artifacts: the Navajo textile demonstrates trade to the south; the hair plate, a Plains tradition, suggests trade to the east; and bead motifs are characteristic of eastern Plains and upper Northeast traditions. The Utes were wide-ranging and were frequently in contact with other aboriginal groups (Smith, 1974).

Ethnographically, the Ute began to amalgamate after 1850 with acceleration after 1868. Reservations were created in northeastern Utah in 1861 and 1882. Ute informants include Pariette Draw in a "core" area of Ute occupation and influence prior to and including the reservation years. The archaeological site record supports these views.

The study of the Pariette Draw burial brought no new surprises. Crevice burials, traditional with the Uintah/Ouray Ute, account for 61 percent of those documented in Ute/Shoshonean contexts (Nickens overview, this volume). Such inhumations were common even into the second and third decade of this Century, along with surface mounded, subsurface and platform burials (Clifford Duncan, personal communication, March, 1982). The body from Pariette was flexed and oriented northwest (head), southeast (foot), the face to the southwest. This typical orientation is probably a direct result of circumstance, due to conditions of the crevice. The burial was covered by cut boughs of greasewood and stones. The entrance was apparently sealed and obscured by rocks. These traits fit traditional Ute customs. The ornate dress and variety and numbers of beads are excellent references to stylishness. The buttons, hair bobs, and moccasins attest to careful preparation probably according to prescribed patterns. Many artifacts relate to an equestrian lifestyle, horses were highly valued. The killing of the animal near the burial site is also consistent with tradition. Interpretation of the Pariette burial is consistently supported by the ethnological and archaeological record. The skeletal material was reburied in a fitting ceremony on April 27, 1983, northeast of Ouray, Utah.

The Pariette burial occurs within a time capsule of a society and era that is no longer clearly remembered but is still recent enough that the present society is conditioned by it. The values, beliefs, and in rare instances the practices, have continued from one phase in the Ute cultural continuum to another. Ethnographic research among various Shoshonean groups is recent. How these beliefs, practices, and their material goods were adopted into each ethnic units' social structure is different. The comparison is difficult. It is hoped that documentation of this burial, with its physical and material offerings, will provide the impetus for generating future research questions in the study of Ute burials.

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