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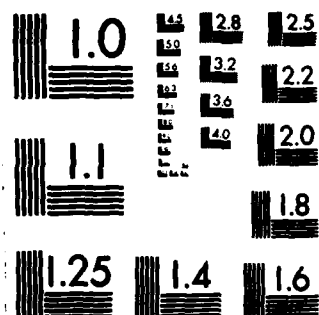
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TOYAVITA DIAVUHORD KORDIN

ETHNOHISTORY AND NATIVE AMERICAN RELIGIOUS CONCERNS
IN THE FORT CARSON - PINON CANYON MANEUVER AREA

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Submitted by Dr. Richard W. Stoffle, Principal Investigator
University of Wisconsin-Parkside
Applied Urban Field School, 1984

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TOYAVITA PIAVUHURU KORON
"CANYON OF MOTHER EARTH"
ETHNOHISTORY AND NATIVE AMERICAN RELIGIOUS CONCERNS
IN THE FORT CARSON - PINON CANYON CANYON MANEUVER AREA

FINAL REPORT

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16. Abstract (Limit: 200 words) This report documents the religious concerns of the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribe of Oklahoma, the Comanche Tribe of Oklahoma, the Jicarilla Apache Indian Tribe, the Kiowa Indian Tribe of Oklahoma, the Southern Ute Tribe, and the Ute Mountain Ute Tribe for cultural resources remaining in the Fort Carson - Pinon Canyon Maneuver Area in southern Colorado. The involvement of these Indian people in the study area is placed in an ethnohistorical perspective that spans more than five hundred years. Report includes bibliography, photos, and maps. <i>Original - supplied agency for review</i>					
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FOREWORD

This report places into ethnohistorical context the concerns expressed by representatives of seven American Indian tribes for traditional sacred cultural resources that exist in the Fort Carson Pinon Canyon Manuever Area. This 380 square mile study area is now a portion of the State of Colorado, but it once was the territory of Indian peoples known as the Jicarilla Apache, Comanche, Kiowa, Kiowa Apache, Cheyenne, Arapaho, and Ute. At the time of this research the study area had already been acquired by the United States Army. The purpose of this research, then, is to establish what religious concerns Indian people have for cultural resources in the study area so that these can be protected as specified in the American Indian Religious Freedom Act of 1978.

The Purgatoire River marks the long southeastern boundary of the study area. This river has created a major High Plains riverine oasis beginning where it flows from its headwaters in the Rocky Mountains to where it merges with the Arkansas River. This riverine oasis is located at the southern junction of two major geographic regions: the Rocky Mountains and the Great Plains. As such, the Purgatoire riverine oasis was attractive to Indian people for its local flora, fauna, and other natural resources as well as for its strategic location between other areas.

Officially, Indian people were removed from the study area more than a century ago. Yet after this removal, they continued to be drawn back to the riverine oasis for hunting and gathering and perhaps for other reasons. Documents and oral history of local ranchers indicate that the Indians returned again and again only to be forcibly removed and sent back to distant reservations. The latest episode documented by this research, was during the Great Depression when the multiethnic Indian community of Alfalfa was formed out of a common need for the plants, animals, and soil of this riverine oasis. That community, like previous efforts to return, was ended in the mid 1940s when the Indian people were forced back to their reservations. The Indian people who once owned the study area have been separated in space and time from it and its resources, but this process has neither occurred voluntarily nor has it caused these people to lose their feelings for the area.

This report is the product of many people but the four authors, Stoffle, Dobyns, Evans, and Stewart, take responsibility for its design, conduct, and final quality. The work, however, could not have been completed without the thousands of hours of work by tribal representatives, students, research associates, and other professional consultants. These efforts are documented in the second chapter of this report. The contribution of each person is gratefully acknowledged.

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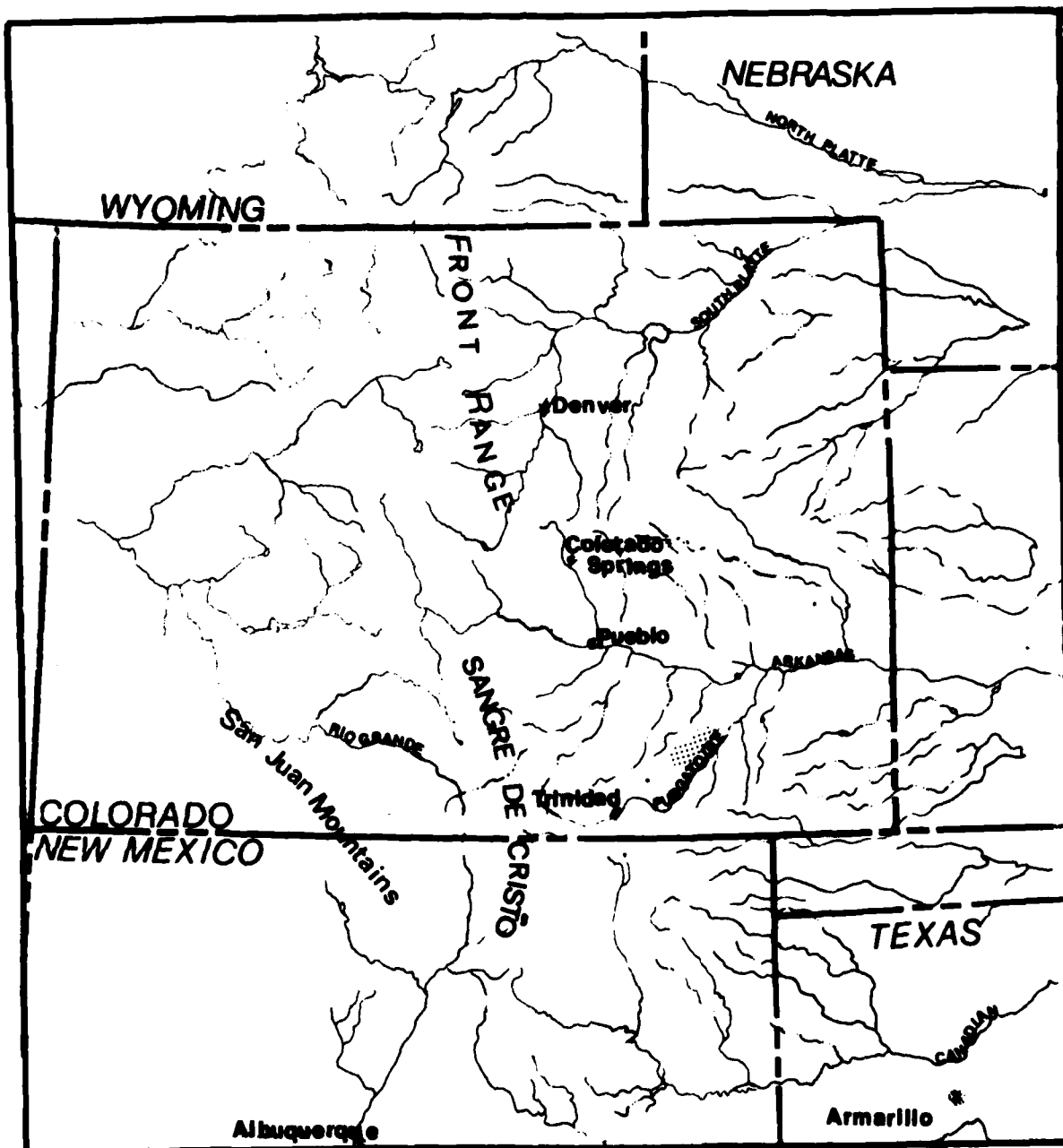
CHAPTER I: ANALYTICAL CONCEPTUAL FRAMEWORK

This is an ethnohistory and a Native American Impact Assessment (NAIA) final report. It is funded by the United States Army and managed by the National Park Service, Rocky Mountain Region under contract number CX-1200-3-A006. The area of analysis is officially termed the Fort Carson Pinon Canyon Maneuver Area. It is located in 380 square miles along the northeastern portion of the Purgatoire River in southern Colorado (see Figure 1 and Figure 2).

A number of federal and state laws and/or regulations call for conducting a study to assess the potential effects of a development project on Native American people and their cultural resources. Such a study, called here a "Native American Impact Assessment" or NAIA, occurs as a part of a more comprehensive set of studies called an "Environmental Impact Assessment" or EIA (see journal Environmental Impact Assessment Review) or a set of mitigation studies which occur after a project is approved. A NAIA may be placed in any one of several sections of the EIA or mitigation set of studies. For example, a NAIA may be defined (1) as part of the "Cultural Resource Management" or CRM studies where there will be a close relationship with the archaeological research (Dickens and Hill 1978). On other projects, a NAIA may be defined (2) as part of the "Social Impact Assessment" or SIA studies where Indian economic, demographic, and sociological impacts can be discussed with cultural issues and the combination with the local non-Indian population (Finsterbusch 1980; Finsterbusch and Wolf 1981; Leistritz and Murdock 1981; see the journal Social Impact Assessment). In still other studies, a NAIA may be given (3) its own category and termed an "Ethnographic" or "Native American Values" or "Sacred Site" study. The present report falls within the latter category. It is, therefore, limited in its scope to a discussion of Native American sacred cultural patterns set within an ethnohistorical perspective. The U.S. Army has already purchased the study area so the research is being conducted in order to establish mitigation recommendations.

The analysis summarized in this final report has been guided by a number of concepts and theories. In this introductory chapter, the authors state explicitly the most important principles and concepts employed in their analysis and data collection process. Other sections of this report present the findings of a study of Native American concerns about the cultural heritage of seven ethnic groups who once lived in the Purgatoire River area. The study necessarily considers Native American cultural heritage at three levels or in three

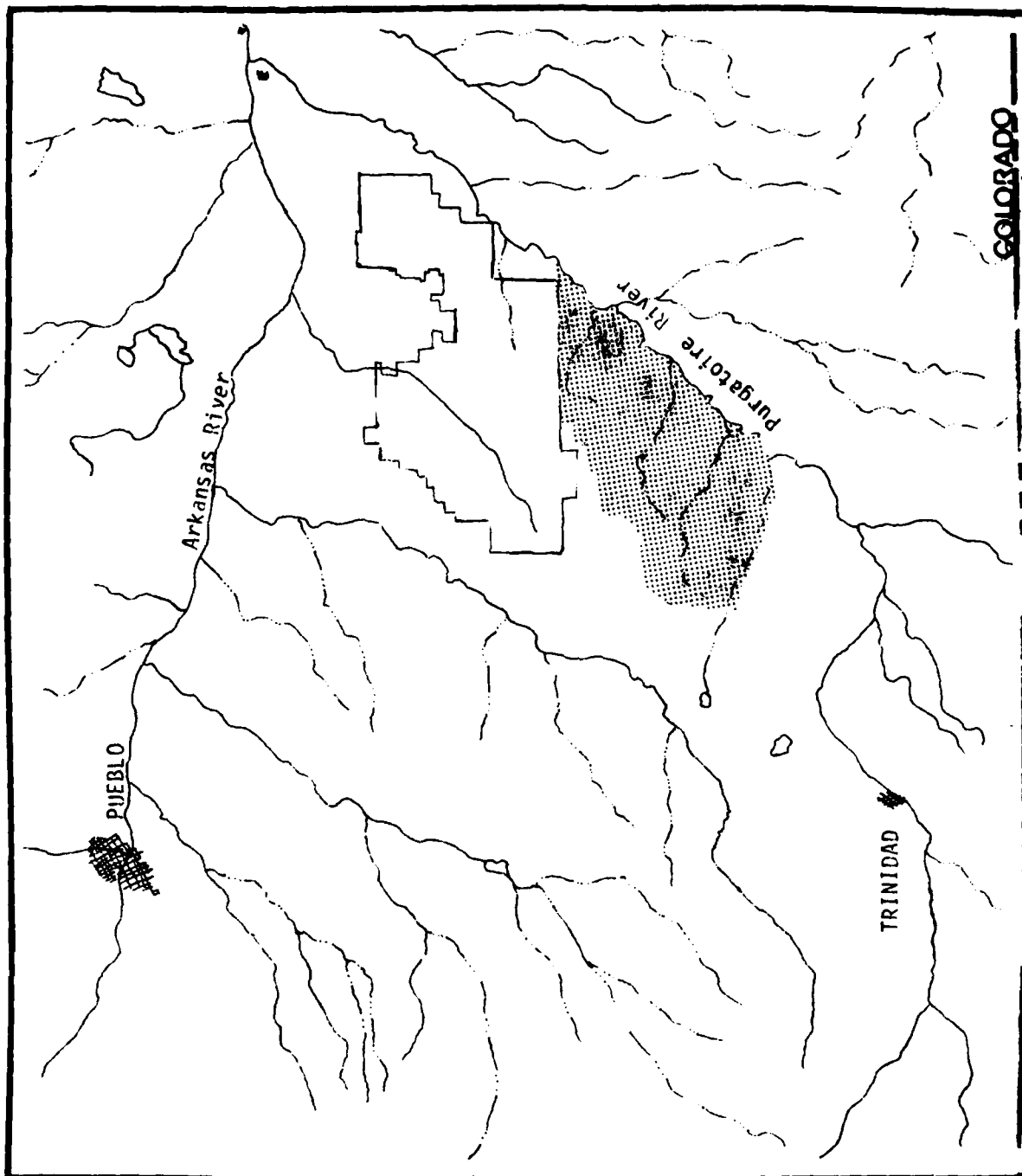
Figure 1: Mountain-Plains Setting of the Purgatory River



Scale
0 100 Miles

Based on
National Geographic Society, 1978.

Figure 2: Fort Carson Pinon Canyon Manuver Area



Scale
0 25Miles

dimensions, at least. One aspect of Native American cultural heritage in the study area is legal, another is scholarly, and another is quite humanistic.

NATIVE AMERICAN RIGHTS

The legal rights Native Americans have in the Purgatoire River study area stem from both international treaty and congressional legislation. Those rights stem from the fact of multi-tribal resource exploitation of the Purgatoire River area prior to United States annexation in 1848, and afterwards. In this section, four policy-setting documents are cited to illustrate the nature of present Native American rights.

TREATY OF GUADALUPE-HIDALGO

Until 1848, the Purgatoire River study area formed part of the northeastern frontier of the Mexican republic. United States territory lay north of the Arkansas River. Mexico, through its New Mexican province, exercised effective jurisdiction over the Purgatoire River area between its independence in 1821, and forced cession in 1848 following its defeat by the United States. A key provision of the peace treaty negotiated at Guadalupe-Hidalgo at the end of 1848 dealt with the rights of religious congregations. Article IX of the treaty provided the "most ample guaranty" for "all ecclesiastics and religious corporations or communities." Each tribal people utilizing the Purgatoire River study area at that time constituted a tribal religious community. Each was, therefore, presumably guaranteed freedom of worship when the United States Senate ratified the treaty (Forbes 1979:1).

The ninth article of the 1848 treaty also provided a specific guarantee "in the enjoyment of their property of every kind, whether individual or corporate" to ecclesiastics discharging the offices of their ministries. In fact, the treaty stated: "No property of this nature shall be considered as having become the property of the American government, or as subject to be by it disposed of, or diverted to other use (Senate Exec. Doc. 52, 30th Cong., 1st Sess., 1847:48). While the authors of the treaty had Roman Catholic priests much more in mind than the priests of Native American tribal congregations, the language of the treaty entered into by the United States is general. It does not anywhere differentiate between the tribe priest and the Roman Catholic priest.

The international treaty terminating the Mexican War guaranteed Native American religious communities residing in the annexed area, then, free use of and access to all traditional places of worship, sacred spots, shrines, ceremonial sites, sacred mountains and springs, pilgrimage routes, and cemeteries or other areas used for religious expression (Forbes 1979:2).

The United States recognized, moreover, that it did not and indeed could not acquire the religious property of religious communities. Unless the United States acquired these guaranteed rights of Native American religious communities by later treaties, the latter retain unextinguished rights to a number of kinds of areas within the Purgatoire River study area.

CITIZENSHIP AND FIRST AMENDMENT RIGHTS

The ninth article of the Treaty of Guadalupe-Hidalgo also provided that the United States would admit "as soon as possible, according to the principles of the federal constitution, to the enjoyment of all the rights of citizens of the United States" those persons who chose to continue residing in the annexed area (Senate Exec. Doc. 52, 30th Cong., 1st Sess., 1847:47). By international agreement, therefore, those Native Americans continuing to utilize Purgatoire River resources and shrines, cemeteries and other sacred sites, were guaranteed all the First Amendment rights of citizens.

Historically, this provision was honored far more in the breach than in the observance. The United States proved to be notably slow in treating Native Americans as citizens. The Congress finally passed in 1924 a general Indian citizenship act, making Indians citizens who had not already acquired citizenship under provisions of the General Allotment Act of 1887, or otherwise. Native American acquisition of citizenship very specifically brought such individuals under the protection of the First Amendment (Freedom of Religion) guarantee.

NATIVE AMERICAN RELIGIOUS FREEDOM ACT

Some Native American religious communities presently or formerly residing in the Mexican Cession area surrendered in later treaties property rights guaranteed by the Treaty of Guadalupe Hidalgo. Their right to freedom of conscience also guaranteed by the 1848 treaty was somewhat ambiguous, in spite of the additional guarantee in the United States constitution. During 1978, the Congress enacted an American Indian Religious Freedom Act (92 Stat. 469 or PL 95-341).

The AIRFA was passed with a section requiring federal agencies to prepare a report to Congress one year from passage of the Act. This report was prepared in consultation with Native traditional religious leaders. Its purpose was to assess then current efforts to protect the religious freedom of Indian people and develop policies to insure further implementation of AIRFA. The report, called American Indian Religious Freedom Act Report, P.L. 95-341, was issued by the Federal Agencies Task Force in August 1979. In the Executive Summary of that report the task force recognized the persistence of Indian people, the importance of their religion to the fabric of their culture, and that federal agencies have denied them their religious rights. The

report cites, for example

Native American people have been denied access to sacred sites on federal lands for the purpose of worship. When they have gained access, they have often been disturbed during their worship by federal officials and the public. Sacred sites have been needlessly and thoughtlessly put to other uses which have desecrated them. Native people have been denied the opportunity to gather natural substances which have a sacred significance and have been disturbed in their use when they have been able to gather them. Indian beliefs regarding care and treatment for the dead have not been respected by government officials in the past.

The present study is an effort by the United States Army with the cultural resource management assistance of National Park Service to address AIRFA concerns. While neither of these federal agencies have adopted policies for implementing AIRFA, the NPS participated in the Federal Agencies Task Force which provides this study with a number of pertinent comments. On February 4, 1978, the National Park Service issued Special Directive 78-1 which committed the NPS to a policy of concern with, informed awareness of and sensitivity to Native American issues, resources and sacred sites (Federal Agencies Task Force 1979:35).

Later in that report, a letter from the NPS, Office of Management Policy dated July 10, 1979, provided a summary of findings derived from their consultation with Indian people. Two comments are directly related to the methodological limitations and findings of this report.

In many cases, tribal representatives pointed out that their responses were not necessarily definitive answers as the voice for the tribe as a whole.

Speaking for one's tribe is something Indian people only do with great caution. Occasionally, such caution has resulted in tribal representatives not making comments while in the field even though they understood that such data was essential, given the rate at which these studies are completed and implemented. At least one of the seven tribes involved in the present study, appointed no representatives to this project because they could not find someone in time to represent their cultural concerns.

A second comment from the NPS Office of Management Policy AIRFA consultation report addresses a related point.

There was indication that some Native Americans do not wish to reveal sites or plants of religious significance because religious practices are secret and they feel that this is the best protection for the site.

Before the American Indian Religious Freedom Act can be

effective, two things must happen. Indian people must come to trust the Native American Impact Assessment procedures that derive the information that is necessary before Indian concerns can be officially protected. Further, federal agencies must develop clear guidelines for implementing AIRFA and protecting appropriate Indian cultural concerns. A climate of mutual trust is essential. Without it Indian people will withhold information and project decision makers will discount the information that is brought forward.

The rights of Native American religious communities in the Purgatoire River study area are thus stated in at least three legal forms. They have been reaffirmed on at least three separate occasions beginning with United States annexation in 1848 and as recently as 1978.

NATIONAL ENVIRONMENTAL POLICY ACT of 1969

Native Americans were legally incorporated into the environmental impact assessment process through the Council on Environmental Quality (CEQ) regulations updating the National Environmental Policy Act of 1969 that appeared on November 29, 1978 in the Federal Register (Vol. 43 No. 230: 44978-56007). In the CEQ update the appropriate role of Indian tribes in the NEPA environmental assessment process was clarified. According to Section 55989, Indian Tribes should have early knowledge of projects, are invited to participate in the formulation of issues and in the research itself, and are invited to comment on drafts of reports before they become available during the "Public Comment Period." They have these rights, "whenever a project can impact Indian people living on a reservation." The status of non-reservation and off-reservation Indian people is not specified. Further, this CEQ regulation broadens the range of Indian impact issues. Indian religion continues as an issue but social and economic impacts now can become legitimate concerns.

The legal environment within which Native American Impact Assessments occur is complex and constantly being redefined by mitigation and litigation. These four laws, however, set the broadest frame within which this study occurs. They suggest the conditions under which NAIAs must occur. The procedures and methods for implementing these legal guidelines are set by individual federal agencies. Currently, there is a national debate over how NAIAs should be conducted (Stoffle, Jake, Bunte, Evans 1981). There are other reasons why NAIAs should occur and upon which to build research procedures and methods. These arguments for NAIAs draw upon national values of right and wrong and are more humanistic than legalistic.

NATIVE AMERICAN CONCERNS

The humanistic aspect of Native American cultural heritage

in the Purgatoire River study area relates quite intimately to the continued existence of tribal religious communities. These religious communities have persisted despite United States federal policies designed to eliminate Indian religions and other traditional ways of life. These Indian people have been forcibly removed from most and sometimes all portions of their traditional Holy Lands (Spicer 1957; Stoffle and Dobyns 1982, 1983).

From the Indian perspective, such Holy Lands are where the Creator brought an Indian people into existence, gave them certain responsibilities regarding the land and its resources, and provided instructions on how to live properly. Spicer (1957:197,213) has suggested using the term Holy Land to convey to non-Indian people the depth of attachment that Indian people feel towards such lands and their resources. Spicer has explained the critical relationship between maintaining these religious commitments and the ability of a people to persist as an ethnic group (Spicer 1971).

Despite removal in space, time, and access from Holy Lands, persistent Indian peoples still hold deep concerns for such areas and maintain a traditional cultural commitment as guardians of the resources (Stoffle, Jake, Evans, and Bunte 1982). Evidence of such commitment is reflected in efforts since the passage of the Native American Religious Act in 1978 of Indian people to regain access to and control over sacred sites.

Critics of this position have suggested that traditional Indian culture is all but gone, citing contemporary life styles and membership in western religions as evidence. Native American traditional religious communities persist, however, despite many historical changes and the presence of other religions among the Indian people. As Professor Omer Stewart has frequently pointed out, most Native Americans who may be formally identified as Mormon, or Catholic, or Anglican converts, perceive no inconsistency in simultaneous membership in their birthright Native American religious communities. A Native American individual may firmly believe in his or her ethnic birthright religious community's traditions, participate in the Native American Church, and bear some allegiance to a Protestant denomination (Stewart 1979:279).

This investigation has found two levels of Native American concern over cultural resources. One may be labeled a general level of concern for all Native American sacred sites; springs, mountains, shrines, and cemeteries that occur in the traditional Holy Land. Such concerns are not geographically specific but refer to certain types of cultural resources wherever they are found. This general concern characterizes the official position of all the official tribal governments contacted and the feelings of Indian people who attended public meetings and interviews held on the reservations.

A second level of concern refers to specific sites located within the Purgatoire River study area. These concerns have been

elicited through on site visitations. No specific level of concerns were elicited from the public meetings or from discussion with Indian people on the reservations.

This pattern of expressing general rather than specific level of concern is not unexpected. It probably derives from two factors: (1) lack of site specific knowledge and (2) distrust of the research itself.

Indian people may not know about specific cultural resources in the study area because of the time that has elapsed since they were forcibly removed from the area. Our documentation, however, indicates that Indian people attempted to return to the area after removal but were repeatedly turned back to the reservations by military force. Thus exclusion rather than lack of concern is a partial explanation for contemporary Indian people not knowing about specific sites in the study area.

An additional source of explanation for why Indian people may not have site specific knowledge is because the Purgatoire River area was a peripheral portion of the traditional territories of all of these Indian groups, except, perhaps, for the Jicarilla Apaches. As such, it was jointly used: an inter-tribal area that has come to contain the cultural resources of at least seven different tribes. Our data suggest that Indian knowledge of peripheral territories was never as complete or as widespread as knowledge of core territory. This factor alone would reduce the amount of site specific knowledge present among an Indian people decades after being removed from a peripheral territory.

Distrust of the research is a factor that must be considered as influencing how specific the Indian people have been in identifying their sacred cultural resources. It must be emphasized that tribal elders have lived during a period when U. S. federal government policy "was the universal suppression of Indian religions" (Collier 1947:234; Collier and Moskowitz 1949:29; Teller 1883:299; Philp 1977:55-70). This point can be illustrated by the Rules Governing The Court of Indian Offenses recommended by Secretary of the Interior, H.M. Teller, to Commissioner of Indian Affairs, Hiram Price on December 2, 1882. The detailed Rules were prepared to be sent to all Indian Agencies under date of March 30, 1883 by Commissioner Price, and received formal approval of Secretary Teller April 10, 1883 (National Archives). Each Court of Indian Offenses was authorized to have as judges three American Indian police officers or cooperative tribal chiefs or leaders. The offenses the Indian Judges were to stop or punish for performing "old heathenish dances," or ceremonies, such as the sun-dance, scalp-dance, etc., plural marriage, the usual practices of so-called medicine-men; destruction of property at a burial, or use of any intoxicants. The rules governing the Court of Indian Offenses could, of course, be applied by superintendents of reservations and agencies if the Courts were not functioning. In fact, each agent was to "... see to it that the requirements are

strictly enforced, with the view of having the evil practices mentioned by the honorable Secretary ultimately abolished" (Price 1883:5).

Many of these people have had to secretively practice traditional religions and participate in the services of the Native American Church under the immediate threat of arrest and imprisonment. Few Indian people contacted during this research were aware of the American Indian Religious Freedom Act of 1978 and even fewer expressed the belief that it will change more than a century of federal, state, and local policy.

A second source of distrust stems from the knowledge that non-Indian people highly value the collection, display, and even sale of Indian artifacts, often including Indian skeletons. It is commonly believed that those Indian artifacts and burials that have not been removed to private homes and museums simply have not been discovered by non-Indians. According to this belief, revealing the location of Indian cultural resources to non-Indians will simply result in the desecration of the resources.

Given the various factors that militate against a study of this type successfully documenting specific Indian cultural resources, there has been a surprising amount of official tribal government and individual tribal member support for the study. These efforts seem to draw upon an acceptance of traditional birthright responsibilities to protect cultural resources in the Holy Land (Spicer 1957, 1971; Collier and Moskowitz 1949:18-19). It is also based on an understanding of the supernatural implications of disturbing a sacred ceremonial site and burial. These efforts further seem to be based on the realization that the Pinon Canyon Maneuver Area has already become the property of the United States Army and that if Indian concerns are not expressed now it is unlikely that there will be a better time to provide recommended protection for potentially impacted cultural resources. It is reasonable to characterize the participation of these seven tribal governments and their tribal members as tentative and experimental. They are hopeful but cautious participants in the study, who will closely evaluate the results of their efforts.

SCHOLARLY CONCERNS

As so often occurs in interdisciplinary research, findings may contribute to more than one question. An obvious juxtaposition of interest between Native American, ethnohistorians, and archaeologists has been realized through interdisciplinary on site teams. During on site visits Native Americans have been guided to key cultural resource areas by Denver University archaeologists. Unexpectedly, a number of Indian people have been able to provide interpretations of petroglyphs and pictographs left by their tribe. These artifacts appear throughout the study area but are difficult to interpret

because they tend not to be stratigraphically associated with other archaeological or geological features. New hypotheses regarding unusual distributions of artifactual assemblages have been proposed by Indian people and positively received by project archaeologists. Such hypotheses are based on esoteric knowledge that is unlikely to be held by non-Indians. In some cases we have been able to provide information that is only known by selected members of a tribal group. These interactions are perceived as mutually beneficial by the Indian tribal representatives and the archaeologists.

Another juxtaposition of interest stems from the concerns of Indian people for plants traditionally used for food, fiber, and medicine and botanists' concerns with analysis and conservation of special plant communities. During the thousands of years that Indian people occupied the study area, they continually interacted with local plants. In other areas of the country, longitudinal research has demonstrated that similar interactions have altered the plants and their ecological communities. The Colorado Nature Conservancy, botanists, and other scholars concerned with the scientific study of unique plant communities and the wildlife they help maintain, are concerned with Purgatoire riverine oasis. Native Americans during the on site visitations have provided a unique understanding of how these special plant communities came into being. Perhaps Native Americans also can provide guidance for environmental management procedures designed to maintain these natural resources.

Although there are other points of mutual benefit that have and will derive from the interdisciplinary transfer of information between Native American cultural experts and project scientists; these examples may serve to illustrate the value of having the people whose ancestors for centuries reverently managed this land -- by firing vegetation (Dobyns 1981:127-43; Lewis 1973; Stewart 1956:115-20), domesticating food and fiber plants and irrigating them in riverine oasis fields (Wissler 1938; Nabhan et al. 1981:135-64), scattering deliberately or unconsciously edible seeds of forbs and grasses (Castetter and Bell 1951), transplanting valued species (Shipek 1977; Stoffle and Dobyns 1983) hunting abstemiously, and fishing -- talk with the people who seek scientific principles by which to manage the land during coming centuries.

CHAPTER II: TASKS AND ACTIVITIES

This section reviews the research tasks specified in the U.S. National Park Service Contract No. CX-1200-3-A006 for the Ethnohistorical and American Indian studies and presents a chronology of the field work that has been completed in partial fulfillment of these tasks.

STUDY TEAM MEMBERS

The tasks and activities described in the latter portions of this Chapter were completed by the teamwork of more than a dozen project staff members. This is a brief summary of these members and their activities.

The Principal Investigator is Dr. Richard W. Stoffle who is an Associate Professor of Anthropology and Director of the Applied Urban Field School at the University of Wisconsin-Parkside, Kenosha. He participated in proposal writing, project management, field work, data analysis, and the writing and editing of this report.

The project has two professional ethnohistorians and an ethnographer who contributed their years of experience and considerable research and writing skills. Dr. Omer C. Stewart is Professor Emeritus of Anthropology at the University of Colorado, Boulder. In addition to working on the ethnohistory he attended most of the public meetings held on the Indian reservations and served as a field ethnographer. Dr. Henry F. Dobyns is the Director of the Native American Historical Demography Project at the Newberry Library, Chicago. He also served as co-editor of this final report. Michael J. Evans is a Ph.D. candidate in the Department of Anthropology at the University of Florida. He served by doing the background research for the contract bid, helped write the bid proposal, helped manage the project's budget, and directed the UWP field school in Denver, Colorado.

Specialized expertise was provided by two other professionals. Our project linguist and field ethnographer was Dr. Pamela A. Bunte who is an Assistant Professor of Anthropology at the New Mexico State University, Las Cruces. Ethnobotanical expertise was provided by Dr. Ivo E. Lindauer who is Professor of Botany at the University of Northern Colorado, Greeley. Assisting Dr. Lindauer, was Sarah D. Lindauer who collected voucher plant specimens and sketched petroglyphs with Viola Hatch.

Mary A. Tremmel, Grants Administration Specialist for UWP, helped prepare the bid and final contract and has managed the budget since. The day-to-day management of the project has been greatly helped by Florence V. Jensen who has her BA degree in Sociology and Applied Anthropology from UWP. She also contributed to document transcription, data analysis, and report editing. Two student research assistants, Todd L. Howell and Susie Finney, served as UWP field school students and returned to assume productive roles in the development of this report. Cheryl Last, MA candidate in Applied Sociology at the University of Kentucky, produced the maps, title page, and cover graphic. David Halmo, MA candidate in Applied Anthropology at Georgia State University, helped with data transcription. UWP field school members, other than the two already mentioned, are: Mike Daniel, Patty Deluisa, Sue Engdahl, and Dave Margetta. Danny Rasch, returned from two years as a Peace Corps Volunteer in Zaire, Africa in time to help with the editing of this report.

Clearly, this report is a product of considerable interdisciplinary study team effort. It would have been impossible, however, without the cooperation of the Indian people who have worked so closely with us, the Denver University archaeologists who shared their camp and their knowledge, and the National Park Service archaeologists, Steve Chomko and Bill Butler, who have helped us understand our role in this NAIA process as it applies to this project.

PROJECT TASKS

PROJECT START-UP MEETING

On April 7, 1983, the U.S. National Park Service announced that the contract to conduct the Ethnohistorical and American Indian studies was awarded to the Applied Urban Field School of the University of Wisconsin-Parkside with Dr. Richard W. Stoffle as the Principal Investigator. On April 12th, Dobyns, Stoffle, Jensen, and research assistants working with the AUFS held a project start-up meeting. At this meeting project tasks were discussed and allocated to members of the research team. Other members of the team were contacted by phone at this time and soon began working on their prearranged portions of the research.

NATIVE AMERICAN COMMUNICATION NETWORK

The first major task of the study team was to establish a formal communication linkage with the official representatives of every potentially impacted Native American tribe. The study team identified potentially impacted Native American tribes as those whose ancestors once inhabited and used the study area and could, therefore, view it or portions of it as sacred. The Navajo people have been studied by so many scholars that religious

dimensions of their culture are relatively well known (Wyman 1983; Tome 1983; Dobyns and Euler 1972). The Navajo Holy Land lies so far west of the Purgatoire River that no additional field study was thought to be necessary although historic documents refer to transitory Navajo visits to Jicarilla residents there. These ethnic groups whose ancestors formerly lived in or near the study area were identified by consulting historical and ethnographic publications. On April 26, 1983, phone calls were made to each of the tribes. A formal letter containing a schedule of activities that had been initially discussed with the official tribal representatives was mailed to each of the tribes on April 26th. The following tribes were contacted: Jicarilla Apache Tribe, Comanche Tribe, Kiowa Apache Tribe, Kiowa Tribe, Cheyenne/Arapaho Tribe, Southern Ute Tribe, and Ute Mountain Tribe. This two-way communication linkage is called the Native American Communication Network (NACN). The following tribal chairman have been contacted and since then have worked with the project:

Cheyenne/Arapaho Tribe - Juanita Learned
 Comanche Tribe - Bernard Kahrahrhah
 Kiowa Tribe - Billy Evans Horse
 Kiowa Apache Tribe - Lonnie B. Tsotaddle
 Jicarilla Apache - Leonard Atole
 Southern Ute Tribe - Leonard Burch
 Ute Mountain Ute Tribe - Ernest House

These contacts continued throughout the research until the completion of this final product.

In order to more fully involve the tribes and reduce miscommunication and mistrust of the research process, each tribal chairman was asked to appoint an Official Tribal Contact Representative (OTCR) to the project. The following are the OTCRs listed by tribe:

Cheyenne/Arapaho Tribe - Viola Hatch
 Comanche Tribe - June Sovo
 Kiowa Tribe - Rueben Stumblingbear
 Kiowa Apache Tribe - Paul Killsfirst
 Jicarilla Apache Tribe - Arnold Cassador
 Southern Ute Tribe - Douglas Eagle
 Ute Mountain Ute Tribe - Nelson Elkriver

The OTCRs are the major link in the NACN and have been responsible for keeping their chairmen and councils updated. A number of additional persons have been placed on the NACN at either their request or that of some tribal official.

In order to aid the OTCRs in their function as information communicators, a one day orientation was conducted in Trinidad, Colorado. This was followed by three days of on site visitation where OTCRs observed cultural resource sites, made drawings of petroglyphs, collected plant specimens, and took photographs. These visual aids were then returned to the respective tribes and



Plate 1. One of the three Arapaho youths who participated in the on site visit to the study area.



Plate 2. Robin Walker, the Kiowa youth who participated in the on site visit to the study area.

made part of presentations to chairmen and councils.

LITERATURE SEARCH, ANNOTATION, AND ASSESSMENT

The first stage of the literature search was to conduct computerized library searches utilizing key bibliographic terms. This expanded the existing data bases of the professional research team members. There has been an effort to compare team data bases and to fill in gaps where appropriate. This stage of the process continues as analysis raises new questions.

The second stage of the literature search involved (1) visiting nationally recognized library collections such as the Newberry Library, the Colorado State Historical Society, the University of Denver Library, the University of Colorado Library and the Denver Public Library, and (2) developing a computerized index of documents. Students from the University of Wisconsin-Parkside spent sixteen days working on original documents research in Denver, Colorado. Drs. Dobyms and Stewart have been working with their own collections and collections available to them at the Newberry Library and the University of Colorado.

The third stage of the literature search occurred while Drs. Stoffle and Stewart visited each of the Indian reservations. During these visits, pamphlets, books, and other types of documents were collected. In addition, considerable information was available in the various cultural heritage museums. Such information was taped as part of the field notes.

FIELD ETHNOGRAPHY

The purpose of the field ethnography is to provide Indian people with special settings in which they can discuss the project and provide various types of feedback. It was expected that three types of field interviewing would occur: (1) public meetings, (2) interviews with Indian people who had lived in or visited the study area, and (3) religious specialists and technical leaders. The first and third of these types of interviews occurred. No Indian person has been found who has lived in or visited the study area before the on site visitation. However, it must be understood that by no means have all Indian people been made aware of the project.

Public meetings have been held for all of the Indian people who potentially have cultural resources in the study area. The designed purpose of these meetings is to discuss the legal basis of the study, to outline the research methodology and schedule, to discuss the role of the OTCR, to describe the study area with maps and slides, and to provide an opportunity for questions and answers. These goals have been reached in a majority of cases but a number of factors have reduced one or more designed

functions. For example, announcements of the meetings varied greatly from tribe to tribe. Some tribes chose to restrict the meeting to the tribal council and no public was present. Even when well announced, many people, especially the elderly, could not attend the public meeting because they live far from where it was held. Given these limitations, however, the public meetings have placed study team members in touch with the greatest number of Indian people and provided many useful insights.

Interviews away from the study area generally resulted in one-way communication. Indian people asked questions about the project and the study area and received answers. Research team questions, however, usually were met with general comments. Possible reasons for the lack of site specific detail in Indian responses have been discussed in the previous section. People expressed concern for the future of Indian cultural resources. Because the on reservation Indian people were not providing site specific information, the mini-survey, originally included in the research design, was eliminated. The mini-survey was initially included on the assumption that Indian people would have site specific knowledge of the study area. This decision was agreed to by the OTCRs who felt that on site visitation was the best way to elicit site specific responses.

ETHNOBOTANY

Previous Native American Impact Assessments conducted by this research team suggested that ethnobotanical concerns would constitute an important part of the study. This assumption was upheld by the field work.

The project botanist, Dr. Ivo Lindauer and his assistant were present during the first three days of on site visitation. During this time extensive concerns were expressed for plants by the Indian representatives. Dr. Lindauer collected voucher specimens for each Indian plant of expressed concern and of known use by the Indian people of the area. Each specimen has been pressed and labeled for inclusion in the University of Northern Colorado herbarium. A second set of specimens is stored in the herbarium at University of Wisconsin-Parkside. The plants have been identified by Dr. Lindauer according to their scientific and common names (Lindauer 1984; see Appendix A). He has provided a site by site analysis of the plant communities encountered during the on site visitation. Indian names and uses for the plants are derived from information provided during the on site visitation and from published ethnographic accounts. Dr. Pamela Bunte has furthered our understanding of this aspect of the ethnobotany. Dr. Bunte has written the Indian words in her modified IPA script which make the words more readable in the text of the report.

Additional botanical insights were provided by the second and third on site visitations. Because these visits occurred in late summer and early fall, no voucher specimens were collected.



Plate 3. Dr. Ivo Lindauer, project botanist from University of Northern Colorado, Greeley, working on plant specimens during the on site visit.



Plate 4. Botanical records in the field were kept by Sarah Lindauer, assistant to the botanist.



Plate 5. Co-author of report and director of field school Michael J. Evans, with field school member, Susie Finney, and Kami Stoffle at the Ute Mountain Ute Tribal Park.



Plate 6. Ute Mountain Ute guide with field school members, Todd Howell, Sue Engdahl, Michael Daniel, and Dave Margetta.

CHRONOLOGY OF FIELD WORK

In this portion of the Tasks and Activity section is a detailed discussion of the completed field research activities. Here activities are discussed according to when they occurred. Although detailed discussions of these data are provided in the next two sections, the data are discussed when modifications in the methodology have been made to take advantage of, or to compensate for, unexpected data patterns.

JUNE: NATIVE AMERICAN ORIENTATION

On June 16, 1983, the Official Tribal Contact Representatives (OTCRs) and Native American Plant Specialists (NAPSS) met with Dr. Richard Stoffle in Trinidad, Colorado. The one-day meeting was held at Trinidad State Junior College in the Library Seminar Room. Although all seven Indian Tribes were invited to attend, only representatives from three were able to attend. Present was Mr. Nelson Elkriver representing the Ute Mountain Ute tribe, Mrs. Viola Hatch representing the Cheyenne-Arapaho tribe, and Mr. Reuben Stumblingbear representing the Kiowa tribe. The Cheyenne-Arapaho tribe sent three young adults and the Kiowa tribe sent one. Also present were study team members Dr. Ivo Lindauer, project botanist from the University of Northern Colorado and his field assistant, Sarah Lindauer.

The goal of this seminar was to acquaint Native American participants with the various aspects of the project. Areas of discussion centered around the laws that govern the work of the project and the characteristics of the project study area in particular. Each of the Indian participants were provided the following items: (1) a book entitled INDIAN SIA, (2) a copy of the American Indian Religious Freedom Act of 1978, (3) a copy of California Senate Bill Number 297, September 1982, which deals with the disposition of Indian burials in that state, (4) a paper by Paul Nickens entitled, "Ute Burial Site", (5) a reprint of SOCIAL IMPACT ASSESSMENT Number 65/66, that contains an article by Stoffle and others discussing our research methods, (6) a copy of the initial letter sent by Dr. Stoffle to each tribal chairman, titled: Project Announcement 4-26-83, and (7) a small map of the project area.

Pertinent federal laws discussed were the American Indian Religious Freedom Act of 1978, the National Environmental Policy Act (NEPA) of 1969, and the Council on Environmental Quality (CEQ) updates of 1978, which are the primary legislation supporting Native American Impact Assessments. State laws in California, Colorado, and Utah were discussed to illustrate the variety of ways that the federal laws have been implemented locally.

JUNE: NATIVE AMERICAN ON SITE VISIT

During June 17th, 18th, and 19th, the project team was on site at the Pinon Canyon Maneuver Area. Present in the field, along with above mentioned tribal representatives, were Mr. Reuben Stumblingbear's grandson, Robin Walker, and Mr. Don Hatch, Mrs. Viola Hatch's husband. The Native American study team was guided through the study area by Mr. Steve Chomko, National Park Service archaeologist and Mr. Mark Guthrie, archaeology field director for Denver University. Information about study area site locations, botanical distribution, and archaeological features was provided by numerous members of the Denver University field crew. The generous sharing of time and expertise by the National Park Service and Denver University personnel, significantly improved the quantity and quality of this Native American Impact Assessment report.

The project team arranged for room and board accommodations at Trinidad State Junior College. Each day the team traveled to the study area where they spent as many as twelve hours per day on site. In order to increase time on site, the Denver University archaeologists permitted the Native American study team to take their evening meals on site. This adjustment in schedule also increased the positive interactions between the two study teams.

A fuller discussion of the findings from this on site visit is provided in later chapters; however, one site deserves special mention because it represents an unexpected benefit of the visit. While interpreting the pictographs at the Rock Crossing site, Viola Hatch indicated that some were like those made by the Cheyenne and Arapahos during one of their ceremonies. At this point the red paintings in the small rock shelter were looked at by Nelson Elkriver. Although officially representing the Ute Mountain Tribe, Nelson recognized symbols taught to him by his Cheyenne father. It turned out that his father was a member of the Kit Fox Society of the Cheyenne tribe. As such, it provided Mr. Elkriver with access to knowledge about Cheyenne religion that would have been difficult for Mrs. Hatch to have. At this point Mr. Elkriver expressed an interest in visiting Oklahoma and participating in one of the upcoming ceremonies directed by the Kit Fox Society. Mrs. Hatch, who is Vice Chairwoman of the Cheyenne-Arapaho tribe, encouraged this visit, and project funds were used to help defray some of his travel expenses. On June 19th, Mr. Elkriver left for Oklahoma. This instance illustrates the deep personal commitments exhibited by these Indian people to the identification and protection of the cultural resources in the study area.

Even though the on site visitation was completed on June 19th, Dr. Stoffle made an additional one day on site visit in order to take photographs, check records, and coordinate with Mr. Steve Chomko. Mr. Elkriver also returned to the study area

during the morning of June 19th in order to provide additional taped interpretations of sites visited earlier.

JUNE - JULY: ETHNOHISTORICAL DOCUMENT COLLECTION

The UW-P Ethnohistorical Field School, under the direction of Michael J. Evans, departed the University of Wisconsin-Parkside campus on the morning of June 20th en route to Denver. After two days driving, the director and six students arrived on the evening of June 21st. The field crew stayed in Denver University dormitories. For twelve of the next sixteen days, the students scanned and copied pertinent documents in the Denver University Library's Archives Section, the Denver Public Library's Western History Section, and the Colorado State Historical Society. These sources provided an abundance of new source materials.

Six hundred and twenty-three articles from ten different newspapers were gathered. Searches began with the earliest available issues of each newspaper, inasmuch as these issues tended to contain more information on Native Americans. The main criteria that determined which newspapers were to be covered depended on proximity to the project site. The largest volume of articles came from THE DAILY ROCKY MOUNTAIN NEWS, for three reasons. First, because the THE DAILY ROCKY MOUNTAIN NEWS was the major newspaper of the region during the years that were scanned. Second, it was the only newspaper that was indexed. Third, it had the oldest available documentation, beginning at 1859 (As the WEEKLY ROCKY MOUNTAIN NEWS). Articles were selected because they contained information on at least one of the following: (1) attitudes of Angloamericans towards Indians and vice versa, (2) agriculture, in or near the study area by Anglos or Indians, (3) any Indian activity in or near the study area, (4) any diseases which reached epidemic proportions, even if Native Americans were not mentioned, and (5) any and all appropriations of land, such as land sales and land grants, insofar as it concerned the study area.

Some examples of types of articles found were fights, raids, travellers' routes, and short news items. For instance, an Arapaho raid on settlers on the Purgatoire River was mentioned in the WEEKLY ROCKY MOUNTAIN NEWS (February 13, 1861). Travellers' accounts were also interesting. Appearing in the WEEKLY ROCKY MOUNTAIN NEWS (May 7, 1859), was an article in which the Cheyenne and Arapaho Indians announced that:

if the whites do much longer persist in travelling through that part of their territory (Arkansas River area), and thereby render it in a great measure almost useless as a hunting ground, they shall from motives of self-preservation resort to open hostility.

Even short news items provided a wealth of information, as exemplified by an article about a nine foot tall grizzly bear

image carved in sandstone on the banks of the Purgatoire. The article went on to state that Indians went there to "make their medicine" (ROCKY MOUNTAIN NEWS, November 10, 1871).

In addition to newspaper articles, personal letters were obtained from the Colorado State Historical Society. These letters were primarily correspondences between U. S. Army generals and congressmen or Indian agents. These letters are significant in that Indian treatment, movements, and hostilities are noted.

Other documents gathered from the Colorado State Historical Society include scrapbooks and memoirs written by prominent individuals in the American Southwest during the middle to late 1800's. The scrapbooks include items such as photographs, personal receipts, newspaper articles and memoirs. The memoirs are important because often they relate specific events from a different perspective than other sources. For example, "The Frontier-Forty Years With the Cheyenne," a manuscript by George Bent, gives an in-depth perspective of the Cheyenne Indians to various historically significant events.

The search for documents in Denver was completed on July 5th when the students left to visit the Denver University archeology site in the Pinon Canyon Maneuver Area. There UW-Parkside students were able to see firsthand the locations that had been discussed in the Denver documents. Interactions between DU archeologists and UW-Parkside students provided an opportunity for mutual sharing of information. UW-Parkside students worked with Denver University archeology field crews on July 6th in order to gain firsthand knowledge of the types of cultural resources that were being discovered. These on site experiences provided an important field grounding of document data that would be coded and analyzed once the UW-Parkside students returned to their home campus.

JULY: ON RESERVATION PUBLIC MEETINGS

UTE MOUNTAIN TRIBE. The Principal Investigator met members of the UW-Parkside field school at Mesa Verde, Colorado on July 10th. From this base camp, they prepared for two days of meetings with the Ute Mountain Ute tribe. The meeting date for the public meeting had been requested on April 26, 1983. Tribal Chairman Mr. Ernest House appointed Mr. Nelson Elkriver to be the Ute Mountain Ute OTCR in which capacity he attended the on site visit and arranged for the on reservation public meeting. Dr. Stoffle and Mr. Elkriver met for two hours on the morning of July 11th to discuss the afternoon meeting. The meeting occurred at the tribal offices in Towaoc, Colorado at 2:00. The legal basis of the study was discussed, and slides of the on site visit were shown in order to illustrate some of the cultural resources already found. After a brief question and answer session, the meeting ended at 3:30 pm.

After the meeting, Mr. Elkriver suggested that Dr. Stoffle and the field school students visit some of the more important archaeological sites located on the reservation. He felt, particularly, they should see the Ute petroglyphs in order to better understand current tribal policy towards the management of Indian cultural resources. He arranged for a trained Ute guide to take the crew out the next day. On July 13th, an all-day guided tour of reservation-based cultural resources occurred.

Due to scheduling conflicts with tribal activities, the Southern Ute and Jicarilla Apache tribes requested that their public meeting be postponed one week. This was agreed to by Dr. Stoffle.

To ensure that proper communication was being made with the Southern Ute tribal administration, the Principal Investigator visited with Mr. Leonard Burch, the Southern Ute Chairman, at Ignacio, Colorado on the morning of July 14th. At this time Dr. Stoffle personally introduced himself and discussed the project with Chairman Burch. Chairman Burch explained that he had not been able to find an appropriate person to appoint to the position of OTCR so there had not been a Southern Ute representative at the orientation and on site visit. He felt, however, that such a person could be appointed and that the Southern Utes were certainly aware that they had left cultural resources in the Purgatoire River area. He asked to wait until after the public meeting before appointing the OTCR. All of the training handouts for the OTCR were left with the Chairman for his perusal.

On the afternoon of July 14th, the UW-Parkside field school left for Wisconsin. After two days of driving, they arrived home. On Monday, July 18th, each of the field school members began the tasks of: (1) indexing the copied documents, (2) placing on computer disks the index and selected articles, (3) coding the computer index, and (4) finalizing their field notes. These tasks were accomplished by the end of the first week in August.

JICARILLA APACHE TRIBE. On Sunday, July 17, the Principal Investigator traveled to Boulder, Colorado to meet with Dr. Omer Stewart. The next morning, July 18th, Drs. Stewart and Stoffle left for the Jicarilla Apache Indian reservation at Dulce, New Mexico. This meeting had been arranged as part of the April 26, 1983 project announcement. The meeting had been rescheduled at the request of Mr. Leonard Atole, Jicarilla Apache Tribal Chairman.

On the morning of July 19th, Drs. Stewart and Stoffle met with Chairman Atole. They were told that the meeting would be at 2:00 that afternoon. Instead of being a public meeting, however, only the tribal council would be in attendance. Drs. Stewart and Stoffle met for about two hours with the council. During that meeting strong concern for the Purgatoire River was expressed by a number of council members. A number of persons

recognized rock art shown in the slides taken during the on site visitation. The council explained that no OTCR was appointed because they were unaware of the project. They requested a second on site visitation; perhaps one that would permit the whole council to visit the site. The Principal Investigator told the council that he would contact the National Park Service to see if funds for another on site visitation could be made available.

SOUTHERN UTE TRIBE. After the Jicarilla Apache council meeting, Drs. Stewart and Stoffle left Dulce for Ignacio, Colorado for the Southern Ute tribal meeting the next day. This meeting had been requested in the April 26, 1983 project announcement letter but was postponed at the request of Chairman Burch. On the evening of July 19th, and the morning of July 20th, Dr. Stewart visited with old friends on the reservation. During these conversations he explained the project. That afternoon, the public meeting was well attended by a large cross section of the reservation population including planners, human service personnel, tribal council members, and members of the Ute Language Preservation Committee. The presentation of project details and on site visitation slides stimulated great interest in the project. The appointment of an OTCR was accepted as a positive step but the people present also wanted a second on site visit so that their representatives could see the site. The Principal Investigator agreed to request an on site visit for them at the same time as for the Jicarilla Apache tribe.

On the evening of July 20th, National Park Service project managers were contacted by phone to request an additional on site visitation. Tentative approval was received. On July 21st, phone calls were made to the Jicarilla Apache and Southern Ute tribes to communicate the tentative approval of the on site visitation.

CHEYENNE/ARAPAHO TRIBE. The next stop on the agenda was Concho, Oklahoma, where Stewart and Stoffle attended a public meeting with the Cheyenne and Arapaho tribes on July 22nd. The meeting was held in the main tribal meeting room. The presentation included the following topics: Native American participation at the tribal level through the OTCR, the study team's schedule, the NPS's role in the project, the laws which govern the project, and a description of the project study area aided by a slide presentation. This was followed by a question and answer session. The Native Americans present were very responsive.

After the public meeting, Stoffle and Stewart were given a tour of the administrative complex. They were introduced to the a number of tribal leaders currently involved in the management of Indian cultural resources for the tribe.

The evening of July 22nd was spent in the home of Tribal Vice Chairwoman, Viola Hatch discussing mitigation of known sites. The next day was spent visiting tribal economic

developments that have combined tourism with historic and cultural preservation.

KIOWA/COMANCHE/KIOWA APACHE TRIBES. On Sunday, July 24th, Stewart and Stoffle traveled to Anadarko, Oklahoma. A joint meeting was to be held at the Kiowa Apache Tribal Office inasmuch as the Comanche and Kiowa Tribes are accustomed to meeting jointly with the Kiowa. On the morning of July 25th, Stoffle and Stewart met with the chairman of the Kiowa tribe and other tribal leaders concerned with cultural resources. Among these people was Mr. Manfred Kaulaity.

At noon, the public meeting was held just after the hot lunch provided for the elders of the tribe. The meeting was well attended by members of the Kiowa tribe. A video camera crew from the Comanche Public Information Office arrived to videotape the presentation for representation to tribal council members who could not attend the meeting. This is an established procedure for the Comanche Tribe. In addition, June Sovo introduced himself as the OTCR for the Comanche Tribe. No representative of the Kiowa Apache Tribe was able to attend the meeting.

The content of this public meeting did not differ from those of other tribes. The discussion was active and the interest was high. Some of the elderly people began to talk about relatives they had from that area. Other elders noted that there were members of the tribe not present that would know more about the study area. Most of these people were either away from the area or lived far from the tribal office.

After the public meeting, Stewart and Stoffle met again with the Tribal Chairman. After discussing the project schedule, he conducted a tour of the new Cultural Heritage Museum located in the Kiowa Tribal Office Building. Stewart and Stoffle left that afternoon for Colorado.

JULY - AUGUST: SECOND ON SITE VISIT

Stewart and Stoffle received funding and permission from the National Park Service to proceed with an additional on site visit as requested by the Tribal Councils/Chairs of the Southern Ute and Jicarilla Apache Tribes.

On July 29th, Stoffle met Stewart in Pueblo, Colorado from where they traveled to Trinidad, Colorado to meet the tribal representatives. Mr. Douglas Eagle and Mr. Neal Cloud from the Southern Ute Tribe were the only representatives who could make the weekend visitation. The Jicarilla Apaches experienced difficult finding representatives who could appropriately represent the views of the Tribe so they did not send representatives. They did request another on site visitation if it would be possible.

All day on Saturday and Sunday, July 30th and 31st, the

Southern Utes were on site. During this time a number of new sites were visited based on the types of concerns of the Indian people and the new findings of the D.U. archaeologists.

The experience proved to be exciting for all involved. In fact, the Southern Ute representatives stayed up all night on the 31st talking about the meanings of the petroglyphs and areas they had viewed. Early the next morning, they wanted to go to breakfast to summarize their observation. During that two hour taped debriefing they presented a series of hypotheses regarding how the area had been utilized by the Utes.

SEPTEMBER: THIRD ON SITE VISIT

At the request of the Comanche and Jicarilla Tribes who were not able to send a representative to the study area during previous on site visits, the National Park Service provided funds for a third on site visit.

On September 15th Stoffle traveled once more to Colorado, to meet with the OTCRs of the Jicarilla Apache and the Comanche Tribes. Although both of these Tribes expressed great interest in visiting the study area, again extenuating circumstances prevented the Jicarilla Apache Tribe from attending.

June Sovo, the Comanche OTCRC, and Mr. Ray Nieto, the Comanche cultural expert, visited various sites in the project area for two days. Together with NPS archaeologist, Steve Chomko, the team visited a number of sites. Because the archaeologists had found many new sites, it was decided to visit these instead of revisiting one where there were known Indian cultural resources. A great variety and quantity of information was provided during these two days. Monday, September 19th, was a travel day home.

PROJECT TEAMS INTERACTION

This research has proceeded on both a face-to-face and a nonface-to-face basis. The previous portion of this Chronology of Field Work section discussed the major face-to-face interactions. It is important to note, however, that to fully understand the process by which this project proceeded we must also look at the type and quantity of nonface-to-face interactions that occurred between University of Wisconsin-Parkside project staff and the various other peoples involved in the study. As a step towards this fuller understanding, the following analyses has been made of all phone calls and letters that have been exchanged between UW-P staff and others related to the project.

Various types of project related persons can be placed into five broad categories. The largest number of interactions (N=259

or 33%) was with Ethnohistory/Native American project personnel. Such interactions derive from the normal sharing of questions and findings during the research process. The Indian tribal contacts constitute the next major category of interactions. These tribes had 176 or 22% of the total project interactions. Such contacts were between tribal Chairs as well as with individual tribal members who heard about the project and called to learn more. The major interactions were with OTCRs appointed by the tribe as the major communication link between themselves and the research. A similar number of interactions (N=179 or 22%) are defined as belonging to the "Other" category. This category reflects interactions needed to run the project and includes calls to car rental agencies, letters reserving rooms at the Trinidad State Junior College dormitories, and calls to typewriter repair shops among many others. Another 10% (N=85) of the total interactions were with other Project Contractors: the archaeologists at Denver University, the geomorphologists at Gilbert Commonwealth, and the historians at Powers Elevation. These interactions reflect our study team's desire and National Park Service requirement to share our findings and emergent research questions with the three other contracting teams. Finally, 9% (N=82) of the interactions were made with the National Park Service as part of the coordination with the project management.



Plate 7. Dr. Henry F. Dobyns at the Newberry Library Center for the History of the American Indian.

CHAPTER III: ETHNOHISTORY, REVISING CULTURAL AREA CONCEPTS AND CORNERS

And it has watched nearly every major event in the winning of the Southwest (Lavender, 1954:14)

The Purgatoire River and the canyon through which it flows afforded comparatively rich natural resources to be exploited by Native Americans. This major tributary of the Arkansas River rises on the eastern flanks of the Rocky Mountains. It flows approximately northeastward through a section of the High Plains to its confluence with the eastward-trending Arkansas River. The Purgatoire River rises and crosses, that is to say, major physiographic regions.

There have been various names for and spellings of the Purgatoire River. In 1911 the United States Board of Geographic Names decided to adopt the French version of the river's name which has become the official U.S. Government designation and spelling and is therefore used in this report (Fourth Report of the U.S. Geographic Board :1916). At that time, the river was commonly called the El Rio de Las Animas Perdidas en Purgatorio, Las Animas, Purgatory, Purgatoire, Picket-Wire, and Picketwire. The original Spanish name means "The River of Lost Souls in Purgatory." Such terms and spellings continued being used beyond the 1911 U.S. Board of Geographic Names' decision and therefore continue to be a potential source of document and oral history confusion.

This ethnohistorical analysis will proceed at two levels of generality. One level focuses upon the relatively small geographic zone consisting of the Purgatoire River and its neighborhood. This microhistorical analysis speaks to the concern over Native American rights of access to and protection of sacred places and to collect sacred substances within the study site. It will identify, on the basis of historical events, seven Native American ethnic groups which possess such rights under the provisions of the American Indian Religious Freedom Act of 1979.

A second analytical level in this analysis deals specifically with one aspect of social science theory, that of the culture area. Both historians and anthropologists have employed the concept of culture area when attempting to describe hundreds of autonomous Native American political entities in terms of their evident underlying cultural similarities. Historians and political scientists have employed the concept of distinctive regions or "sections" within the United States. The

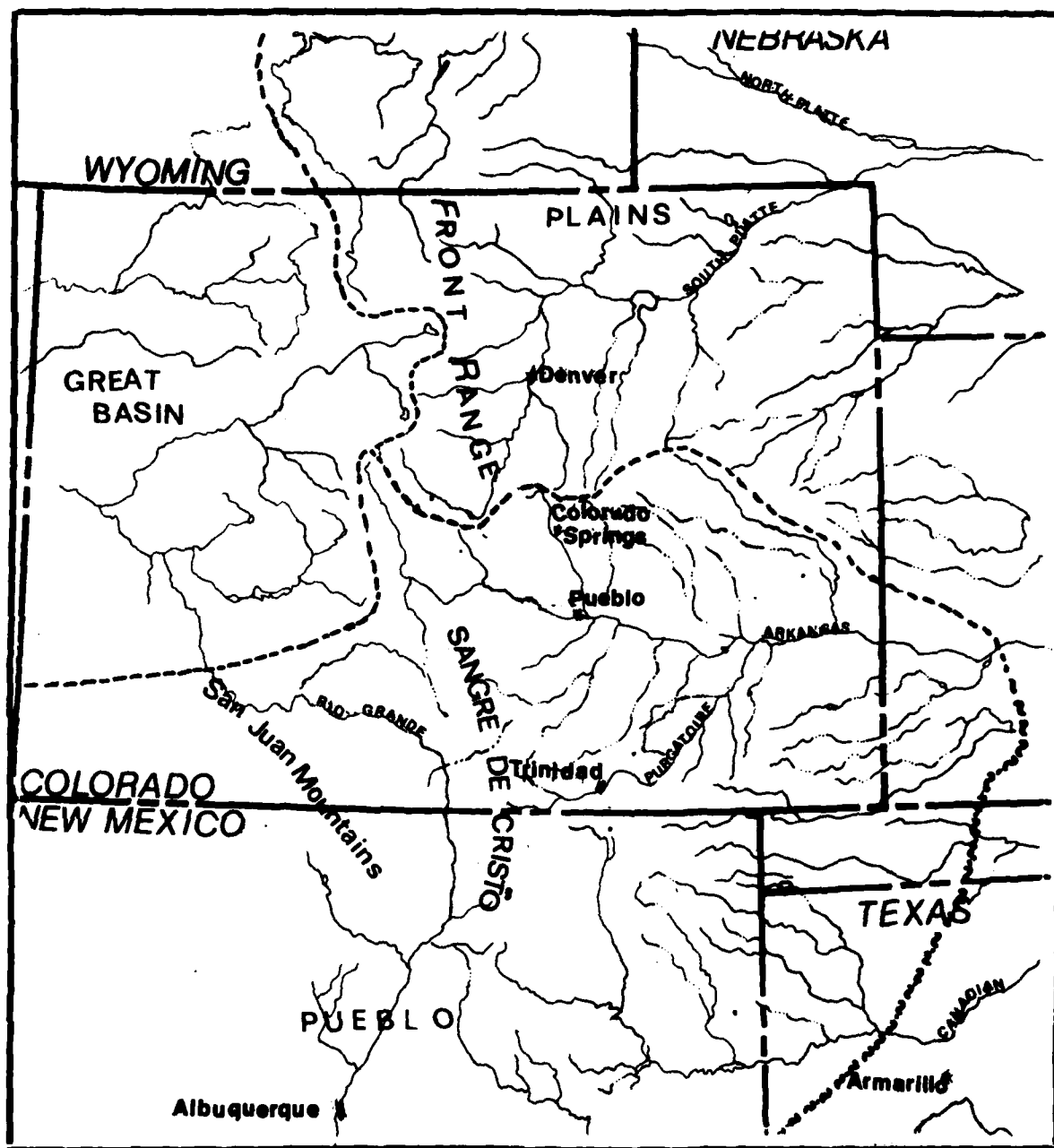
analysis which follows joins the culture area and sectional perspectives. It also introduces into the static description culture area the sorely needed element of temporal change. Thus, the following analysis makes its contribution to social science theory because the historic procession of peoples through the Purgatoire River zone shifted it between what have been regarded as three different culture areas each having static boundaries.

To at least some extent, Native American aboriginal culture areas in which several ethnic groups shared common cultural patterns coincided with major natural regions. Consequently, the Purgatoire River and its canyons are located on or very near the corners of three adjoining culture areas. As A. L. Kroeber (1939:Map 6) conceived their boundaries, the Plains, Great Basin, and Southwest culture areas meet on or quite close to the Purgatoire River (see Figure 3). Spicer (1962) and Dobyns and Euler (1980) have since separated the western Rancherian culture area from the eastern Puebloan culture area. The close conjunction of peoples following distinctive Puebloan, Great Basin, and post-horse Plains cultural patterns makes the Purgatoire River zone an ideal one in which to examine spatial variations and changes in culture area boundaries through historic times.

Representing culture areas and their boundaries on a single map inevitably ignores culture change through time. Nearly all maps showing culture area boundaries employ the device of the line to represent boundaries between areas. Lines lend a false appearance of stability, whereas culture area margins have historically been rather fluid. This is particularly true of the Plains culture area, which was an historic function of the adoption of the horse, firearms, and trading for European and Euroamerican manufactured goods by a limited number of Native American ethnic groups. Most of those groups clearly migrated onto the High Plains only when horses lent them a geographic mobility they had not previously possessed, and Plains game animals provided them with commodities permitting them to obtain industrial products they desired. That the post-horse Plains culture area was an historic phenomenon has long been recognized. In Kroeber's (1939:76) words: "the historic Plains culture was a late high-pressure center of culture in a region which previously had been rather conspicuously low-pressure."

Culture area maps have not, however, usually depicted temporal changes in culture areas and their peoples. They have instead shown culture areas which reflect late Nineteenth Century tribal locations. Thus, such maps freeze culture area boundaries at one particular time. Generally, that time is the quite indefinite "ethnographic present" which ethnographers assumed erroneously they were describing on the basis of retrospective interviews with living Native Americans (Dobyns 1983). Only recently have specialists begun to question the synchronic nature of culture area definitions (Scaglione 1980:32-33).

Figure 3: Classic Culture Area Corners



Scale
 0 100 Miles

Based on
 National Geographic Society, 1978.

SUMMARY

The present analysis describes a series of changes in the peoples who inhabited the Purgatoire River oasis and its canyons. As personnel changed, so did many cultural patterns and culture area boundaries. The native inhabitants of the Purgatoire River oasis at one time clearly were horticulturalists who lived in substantial houses such as sedentary peoples characteristically built. During that period, the Purgatoire River oasis constituted part of the Southwest culture area, or at least its Pueblo branch (Dobyns and Euler 1980). It seems to have been almost Rancherian in that its native inhabitants considered the Purgatoire and other rivers on whose banks they lived and gardened as sacred. Driver (1961:31) emphasized the oasis basis of regional settlement and resource exploitation. In his introductory textbook on North American Indians, Driver relabeled the "Southwest" culture area the "Oasis" culture area. Spicer (1962) and Dobyns and Euler (1980:1-52) later pointed out that a Puebloan culture area occupied the northeastern portion of the Southwestern region. Plains area riverine oases have frequently been differentiated from adjacent grasslands by the "Valley" habitat label (Morgan 1980:149). Before trappers removed beaver, these animals built dams which created ponds and marshes which kept now ephemeral streams flowing through a varied riparian plant assembly (c.f. Stewart 1980). The oasis habitat "was a more stable and extensive network" then than it is now (Morgan 1980:150; c.f. Dobyns 1981).

Later, a succession of ethnic groups exploited the Purgatoire River canyons without engaging in significant horticultural activity. Some of those ethnic groups such as the Ute, often have been classified as following cultural patterns characteristic of the Great Basin culture area (Stewart 1982). One might equally argue that the southeastern Ute groups were misclassified as Great Basin folks and had by the Nineteenth Century become Plainsmen, as Wissler (1938:223, Fig. 59) earlier classified them. Other ethnic groups were Southern Plains peoples in classic culture area classifications. Their presence along the Purgatoire River raises significant historical questions. One might argue that Ute Indian exploitation of the Purgatoire River area temporarily placed that region in the Great Basin culture area. It could also be maintained that Navajo exploitation temporarily placed the zone in the Puebloan, or what Kroeber called the Circum-Pueblo culture area. Actually, the historic cultural patterns become clearer if one recognizes that Navajos made a truly unique cultural adjustment to Spanish colonial intrusion. As sheep pastoralists, the Navajos constituted an historic, new, single ethnic group culture area as distinctive as the post-horse Plains.

The historic parade of peoples through the Purgatoire River oasis both complicates the analysis archaeologists carry out, and presents a seldom paralleled opportunity for studying cultural changes employing archaeological techniques and utilizing related

analyses. We suspect that one or more Puebloan peoples inhabited the Purgatoire River horticultural oasis in late pre-Columbian times. The Sixteenth Century Native American population collapse (Dobyns 1981:50, 1983; Cook 1981) probably resulted in a contraction of Puebloan population which possibly left the Purgatoire River oasis vacant. Archaeological investigation with very precise chronological control potentially could verify whether there was in fact a Sixteenth Century abandonment along the Purgatoire River.

During the Seventeenth Century, Jicarilla Apaches occupied the Purgatoire River oasis considering the stream sacred. They raised crops there during the "Apachean Century" on the Southern Plains, until a general Apachean territorial contraction began about 1720. Thereafter Jicarilla Apaches remained close to the Purgatoire River oasis, and visited it upon occasion. While they lived along the Purgatoire River, Jicarilla Apaches welcomed Navajo friends who traveled eastward to hunt Plains big game animals. The Jicarilla people erected more than one type of dwelling. The Plains-oriented Navajos (Dobyns and Euler 1972:8-9; Hester 1962:70) made additional types of shelters. Consequently, the pre-1720 Apachean period in the Purgatoire River canyons challenges the archaeologist with multiple house types used by only two linguistically related peoples differentiating along distinctive cultural lines (See further discussion in Chapter III).

After 1720, the Southern Plains tribes utilized the Purgatoire River oasis's natural resources. These were the Comanche, Kiowa, and Kiowa-Apache peoples (Kroeber 1939:79). The lower half of the Purgatoire River became the northwestern tip of the Comancheria (Wallace and Hoebel 1952:7). The Arkansas River oasis formed the approximate boundary between the territories of Northern and Southern Plains peoples. Consequently, Northern Plains tribes -- specifically the Arapaho and Cheyenne -- ranged south to the Arkansas River and sometimes across it into the Purgatoire River oasis.

The historic Plains culture area, it bears emphasizing, was generated by European firearms as well as by an Old World domesticated animal, the horse. As the Plains specialist Alexander Lesser (1968:95) pointed out, "the horse had become the most valuable commodity in a Plains economy deeply interwoven through trade and trading posts with the commercial life of an expanding America." French traders advanced up tributaries of the Mississippi River during the final years of the Seventeenth Century. They furnished firearms and munitions to riverine horticulturalists and bison-hunting Plains specialized groups. European firearms played a decisive role in the Comanche victories which made them quite literally the "Lords of the South Plains" at the expense of the Apacheans. The numerous peoples utilizing the Purgatoire River oasis also traded with the Spaniards at periodical fairs held at Pecos, Picuris, and Taos Pueblos (Thomas 1940). By the early eighteenth century, most native peoples inhabiting the Plains natural region were already

to some extent involved in the world market economy. Their dealings with European and Euroamericans traders and trading posts had already set their feet firmly on the path toward socio-economic dependency (White 1983).

One century after the decisive battles of the 1720s and subsequent major population shifts, another historic change affected the Native Americans of the region. Mexico gained its political independence from Spain in 1821. Almost immediately, Anglo-American and French-American traders from Missouri opened the Santa Fe Trail to the province of New Mexico. This commercial route attracted increasing numbers of traders and commodity-laden packtrains and then freight wagons year after year. Consequently, it reoriented the commercial activities of the Native American peoples whose territories it crossed. Indeed, the prospects of trade and thievery attracted some peoples beyond their pre-1821 territories.

Hardly had the Santa Fe Trail been opened when an institution characteristic of the Anglo-American frontier farther east and north entered the Purgatoire River region. This was the Indian trading post. Bent's Fort was built on the Arkansas River downstream from the Purgatoire River. The Purgatoire River oasis lay well within the sphere of direct Bent's trading post influence. Indeed, employees of the trading post attempted to farm a portion of the Purgatoire River oasis. Even though the Southern Plains tribes had already been involved for a least a century in the world market economy, manufactured goods became available at this time in far greater quantities than ever before.

This abundance should be reflected in the contents of post-1820 archaeological sites, unless pot and point hunters have picked up surface remains and destroyed subsurface deposits. There certainly may be other reasons why European commodities are rarely recovered from sites in the Purgatoire River oasis and nearby areas. One of these is that very few European commodities found their way to the frontier of New Spain before 1820. Pueblos known to have been inhabited during colonial times characteristically yield comparatively few European artifacts. The scarcity of European tools and utensils made them very valuable. Consequently, Native Americans and Creoles alike tended to use them until they were completely worn out and used up. Another reason why European artifacts are scarce relative to pre-historic artifacts is precisely because of the Sixteenth Century population collapse. There simply were fewer Native Americans left by 1620 than there had been in 1519. The Central Mexican ratio established by Cook and Borah (1971, 1974, 1979) can confidently be projected to this area (Dobyns 1981:50). Where 1,000 people lived in 1519, fewer than 30 survived by 1620 or so. Aboriginal population lost over 97 percent of their pre-Old World disease invasion numbers.

This brief summary of the historic parade of peoples through the Purgatoire River oasis indicates the nature of archaeological

difficulties and opportunities there. At least eight Native American ethnic groups -- Jicarillas, Navajos, Utes, Kiowas, Kiowa-Apaches, Arapahos, Cheyennes, and Comanches -- have lived in this oasis. Consequently, relating artifacts to specific makers and users is not simple. In addition, at least two distinctive ethnic groups among Euroamerican colonists -- Hispanic and Anglo-Americans -- have utilized the oasis since 1821.

THE PUEBLOAN ERA

A.D. 1490 - 1620

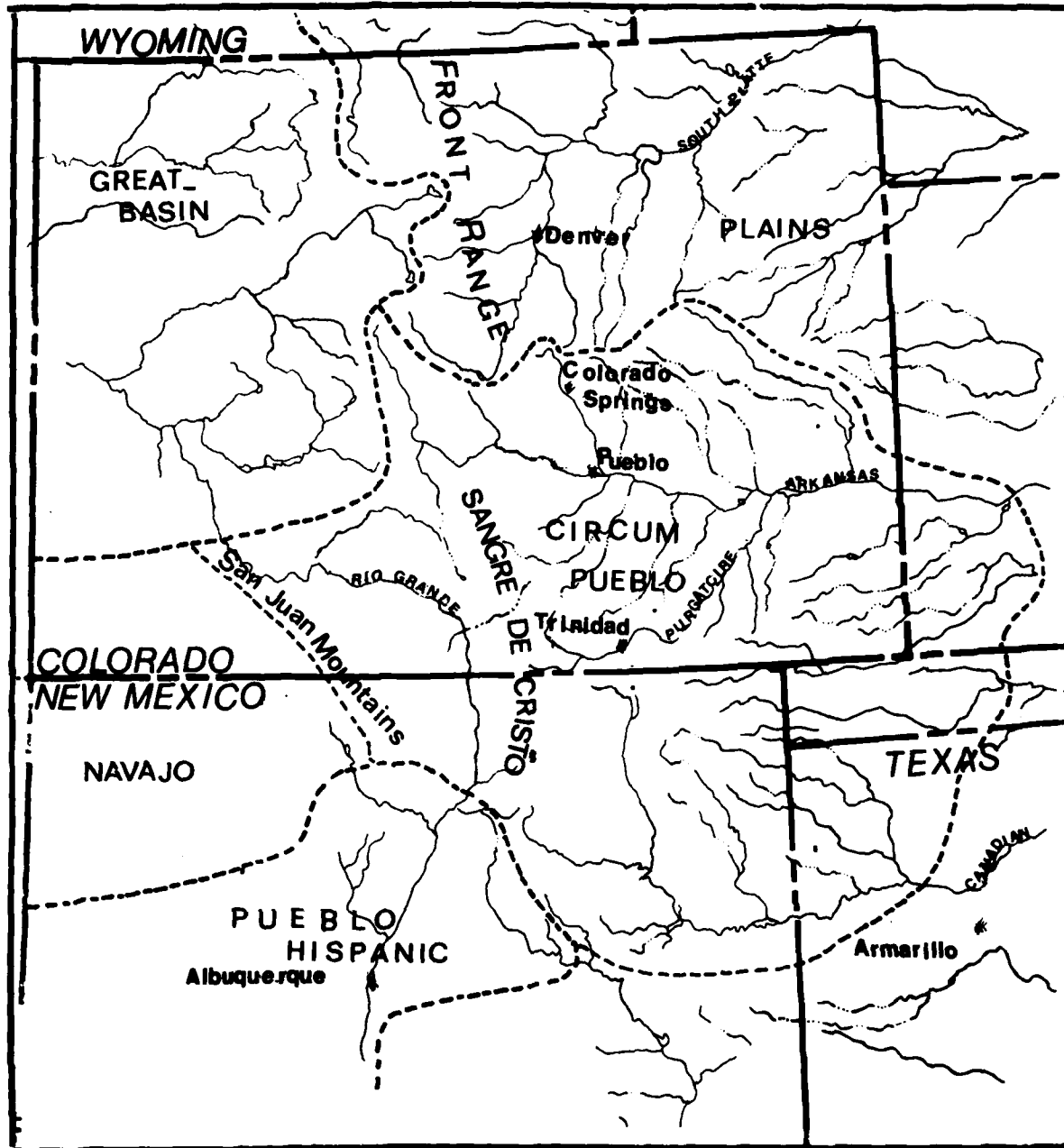
This ethnohistorical analysis deals with population and cultural changes during the historic period. It takes the historic period to have begun in A. D. 1520 when the smallpox virus for the first time swept through New World populations. It caused mortality of between 36 and 74 percent (Dobyns 1983), thus causing catastrophic demographic and cultural changes. By 1620, a century later, Native American peoples under colonial administration had fallen to less than five percent of their early Sixteenth Century magnitudes (Cook and Borah 1971, 1974, 1979).

The highly infectious nature of smallpox and its easy transmission, along with its known spread southward from its point of transmission to continental Native Americans, require the assumption that it decimated horticultural, sedentary peoples of the Southwest (Dobyns 1981:50). On logical grounds, this analysis hypothesizes, that prior to the Sixteenth Century population collapse, Puebloan peoples inhabited the Purgatoire River oasis (see Figure 4). They would have engaged in horticultural food production.

The northeastern frontier of the Pueblo culture area was, we infer, at whatever point downstream along the Arkansas River horticulture ceased to be practicable. Social, cultural, and perhaps demographic factors came into play in determining the limits of horticulture because crops can be grown on the Arkansas River from Canon City to the junction with the Mississippi River. For whatever combination of reasons, Native Americans during the Sixteenth and later centuries apparently did not cultivate crops along the entire length of the Arkansas River. There were Jicarilla gardeners upstream in the Sixteenth and Seventeenth Centuries, evidently up to around 1720. There were Caddoans far downstream. During the 1620-1720 period, however, there appears not to have been horticulture between Apacheans and Caddoans. After 1720, horticulture was not practiced by people on the upper Arkansas, either.

Hypotheses regarding the use of horticulture by different ethnic groups should be establishable archaeologically. If horticulture were a pre-Columbian activity in the Purgatoire

Figure 4: Circum-Pueblo Culture Area



Scale
0 100 Miles

Based on
National Geographic Society, 1978.

River oasis, then archaeologists should be able to recover maize, bean, and squash pollen from storage, occupation, and perhaps field sites dating from the early Sixteenth or late Fifteenth Century. Storage cysts and rock shelters might also yield datable domesticated plant parts, including edible seeds themselves. Cooking fire pits might also yield charred seeds and other cultivated plant parts.

There is another archaeological research opportunity of considerable significance along the Purgatoire River oasis. The Southern Athapaskan-speaking peoples clearly are closely related linguistically to Northern Athapaskan speakers. The Southern Athapascans migrated into their historic territories relatively recently, but different scholars have not agreed as to just when they did so. In the course of their migrations, Southern Athapascans learned to cultivate the summer season, ubiquitous Native American domesticated plants (Dobyns 1981:24, 57-60; Dobyns 1971:15, 22).

Some Indianologists have hypothesized that the Southern Athapascans migrated southward through the Rocky Mountains. If they did so, they could not very well have learned horticulture along their way, because the Great Basin peoples themselves were not horticulturalists, at least as the cultural traits characterizing that culture area have been defined (Stewart 1982:29). Some scholars have attributed Southern Athapaskan horticulture to learning from Pueblo peoples after the Southern Athapascans migrated into Pueblo aboriginal territory. Spanish colonial accounts cited later in this analysis, on the other hand, make clear that Jicarilla Apaches grew crops in the Purgatoire River oasis at the beginning of the Eighteenth Century when they lived well north of any Pueblo. Attributing this Jicarilla horticulture to Puebloan origins requires assuming a retrograde Jicarillan migration northward after an earlier southward migration which brought this group into intimate contact with Puebloan gardeners. It is not, in other words, the most parsimonious assumption possible.

Migrating Athapascans could have observed Mandan, Hidatsa, Arikara, and Pawnee horticulturalists gardening in downstream oasis environments along tributaries of the Mississippi River if they migrated southward via the prairies. Those specializing in Athapaskan studies appear to have perceived the Southern Athapascans as moving along a corridor close to the Rocky Mountain front range, however, without ranging eastward into the territories of the horticultural peoples east of the High Plains.

If the Southern Athapascans did not learn horticulture from the Mississippi River western tributary peoples, then the Purgatoire River hypothesized Puebloan people must be considered the prime candidates as gardening instructors to the arriving migratory Southern Athapascans. If the Southern Athapascans migrated from riverine oasis to riverine oasis along the front range, then the Purgatoire River oasis was apparently the first horticultural production area they encountered. Careful

archaeological investigation of the study area can potentially elucidate the question as to where the migratory Southern Athapascans learned to garden.

If the Purgatoire River hypothesized Puebloan population had retreated during the Sixteenth Century and the Southern Athapascans had not yet arrived, then the immigrants may have learned from Pecos, Picuris, and Taos trading pueblos, and practiced their new skills along the Purgatoire River. The proto-Jicarilla and the proto-Navajos may have observed Pueblo gardeners to the south, and then experimented in fields along the Purgatoire River. Archaeological investigation of pollen, plant remains, and chronology might illuminate this matter of Southern Athapaskan cultural change. Archaeologists have not perhaps used an ethnohistorical approach to interpreting excavated materials as extensively as they might (Wedel and DeMallie 1980:114), conversly, ethnohistorians have not interpreted archaeological finds as extensively as they might (Hayden 1984).

THE APACHE CENTURY ON THE PLAINS

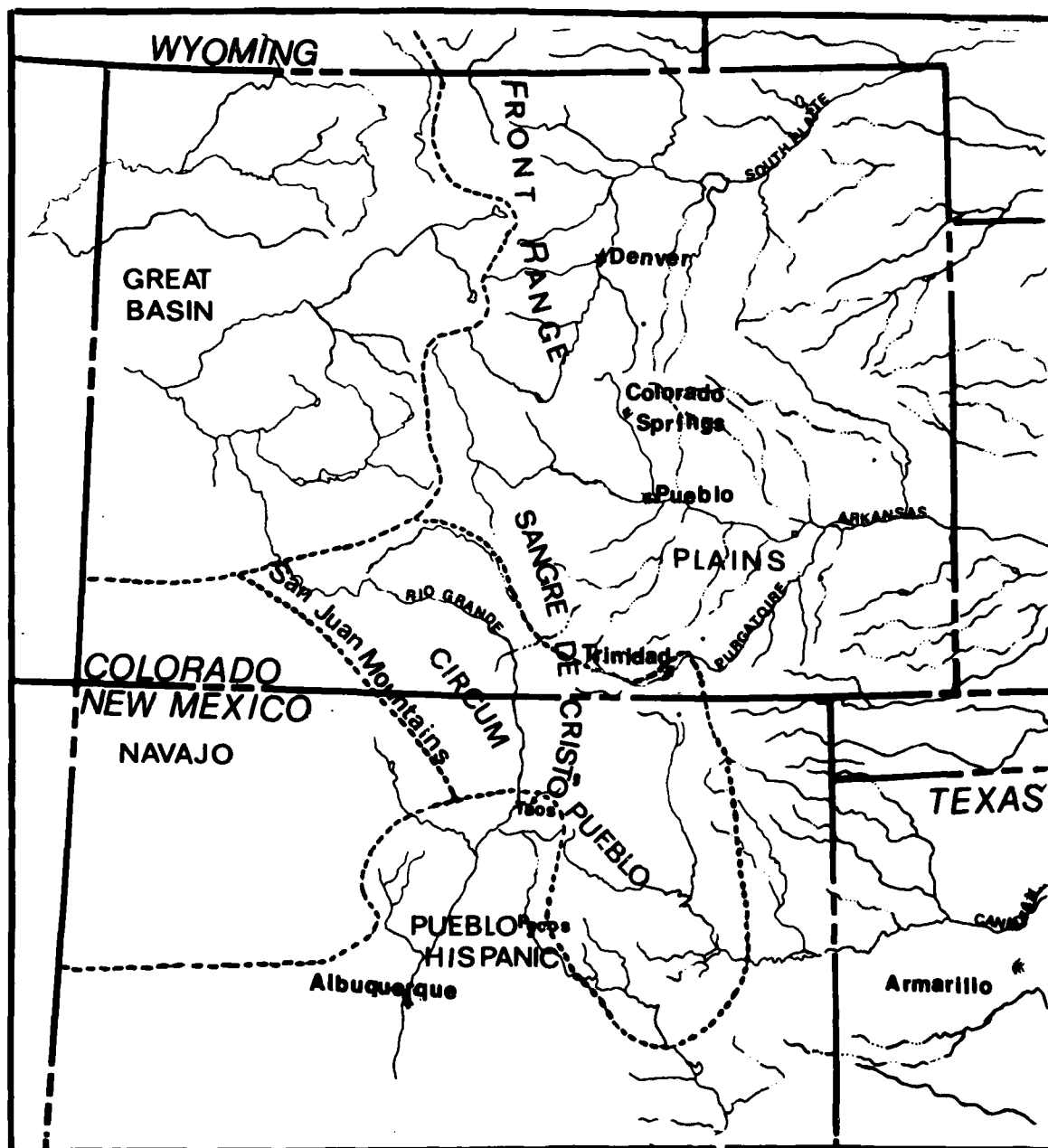
A.D. 1620 - 1720

During the Sixteenth Century, some if not all of the Southern Athapascans were specialized to Plains life. They seem to have lived in a more or less symbiotic relationship with Pueblo peoples to the east and Caddoan folk farther east. The Apacheans appear to have been to a considerable extent trans-Plains traders. For moving tipi skins and poles they depended on, no doubt, specially bred large pack-dogs as well as human energy.

During the latter Sixteenth Century or the very early years of the Seventeenth Century, the Southern Athapascans acquired horses. With the European horse, these Native Americans also borrowed Old World saddles, bridles, reins, stirrups, spurs, and the lance. The horse gear and weapon gave the newly mounted Apaches military superiority over their still unmounted foes. Consequently, the Apacheans were able to win decisive battles of territorial conquest. They expanded down the western tributaries of the Mississippi River while the aboriginal Caddoan peoples retreated eastward (Secoy 1953:20-22). The period between A. D. 1620 and 1720 may best be conceived as the Apache century of exploitation of the southern Plains and the riverine oases crossing them.

If the proto-Jicarilla Apaches had migrated into the Puebloan culture area before they obtained horses, possibly they did expand northward into the Purgatoire riverine oasis during the Apachean Century on the Plains (see Figure 5). In any event, Jicarilla historic habitation in this neighborhood was early enough and continued long enough to be considered aboriginal from the temporal perspective of the United States sovereignty which

Figure 5: Plains Culture Area Maximum Expansion



Scale
 0 100 Miles

Based on
 National Geographic Society, 1978.

began with the Mexican Cession of 1848. Jicarilla Apache territory extended northwest to San Luis Peak in Colorado, approximately where 107 degrees west longitude intersects 39 degrees north latitude. The frontier was then a more or less straight line due eastward along 39 degrees north latitude to 102 degrees west longitude where it turned south along that meridian (Watkins, et al. 1974:183).

The Jicarilla Apache ethnic origin account considers the Arkansas, Canadian, Rio Grande and Pecos Rivers sacred streams the Creator made to demarcate their territorial boundaries (Tiller 1983:3). James Mooney (1898:200) entitled "The Jicarilla Genesis" the ethnic origin account he obtained. It recounted that the Creator made the great mountains. "He made also the four great rivers and gave them their names -- in the north the Napeshti, the "flint arrow" river (the Arkansas)...," in the east the Canadian, in the west the Rio Grande, and in the south the Chama. Thus, the Purgatoire River system lay well within that area which Jicarilla religious belief defined as sacred to them. The region where the Creator placed the Jicarillas was in their perception supernaturally assigned to them, and the land and its resources were to be treated by them as sacred rather than profane. When we speak of Jicarilla "sacred country" or "Holy Land", the terms are being utilized in the same sense that the Wichita Mountains were sacred to Kiowas and Comanches (McWilliams and Jones 1976:13). Military pressure forced Jicarillas physically to leave their Holy Land, just as Jews were forced from theirs. In neither case did removal terminate the spiritual connection. The Jews have been able to reconquer their Israel; the Jicarillas have not, but the American Indian Religious Freedom Act guarantees them access to it. The Arkansas River system, including the Purgatoire River tributary, were and are particularly holy to the Jicarilla people.

The pre-reservation territory of the Jicarilla Apache people, from at least the late Seventeenth Century until their conquest, centered upon the Sangre de Cristo mountain range in southeastern Colorado and northeastern New Mexico. It included the headwaters of the main fork of the Arkansas River and the upper portion of the Purgatoire River, the headwaters of the Canadian River which also rises in the Sangre de Cristo range, and the headwaters of the Rio Grande. This pre-reservation range overlapped with that of the Taos Pueblo Indians, extending southward to the outskirts of the Hispanic settlement at Mora, New Mexico (Wilson 1964; Figure 1). Thus, Jicarilla historic territory included considerably more land with a diverse montane-Plains topography which included more streams than Schlesier (1972:103, fig.1) credited to both what he called the "Colorado Division of Southern Aspect," and a "Panhandle division of Southern Aspect," Apacheans about A.D. 1692. The geographic range of the Plains and Mountain bands of Jicarilla has historically been one of the more stable among the Apache tribes.

Intermountain Utes also acquired horses. By 1675, Ute hunters could ride east onto the Plains to hunt bison during the

fall. By the early 1700s the Muoache and Capote bands occupied the San Luis Valley west across the Sangre de Cristo range from Jicarilla Purgatoire River country (Abbott et al. 1982:26). The valley was one transmontane route to the Plains and its bison.

The Jicarilla Apaches in the Seventeenth and later centuries had a mixed economy. They gardened in the Purgatoire River oasis and similar environments farther south. They also hunted bison on the Plains during the fall and spring seasons. The Southern Plains bison herd migrated between Palo Duro Canyon in Texas and the Purgatoire River Canyon in Colorado. The bison moved in the fall south into central Texas and beyond to winter, then in the spring grazed north to the Purgatoire River area and to Wyoming. Bison hunting was relatively easy in the 200-mile wide corridor between the two canyons, and the Jicarillas killed bison on the western flanks of the moving herds (Watkins et al. 1974:243; Tiller 1983:21). In this area, as on the Canadian Plains prior to about 1830 "Bison movement patterns...retained a recognizable degree of seasonal regularity" (Morgan 1980:145). The movements were seasonal and sufficiently regular to be described as migratory" (Moodie and Ray 1976:50). The Jicarilla hunted, it seems, with techniques which did not divert the bison herds from their customary routes, like more northerly ethnic groups (Morgan 1980:146). Jicarillas benefitted from expanded hunting opportunity when drought or severe winters farther north occasionally drove bison southward in greater numbers, as occurred with range cattle in the 1880s (Greer 1976:238). Jicarilla hunters also killed deer, elk, mountain goats, and mountain sheep in the Raton and Sangre de Cristo Mountains, especially in the Purgatoire River canyon between modern Trinidad, Colorado and La Junta, Colorado (Watkins et al. 1974:187, 242, 244).

Very soon after Spaniards colonized the Upper Rio Grande Valley, they became customers of Apachean hunters. During the Seventeenth Century, the Jicarillas were "commercial hunters" (Gunnerson 1974:141). Even before Jicarillas acquired sufficient horses to use some as pack animals, their "long trains of pack dogs" probably reflected their response to "sudden and powerful economic stimuli" (Perry 1980:292). On the other hand, Spanish colonists were so few in number, that, in spite of their high animal protein consumption, they may not have generated as much demand for meat as the Puebloans who had perished during epidemic disease episodes.

Jicarillas also harvested wild plant food, including pinyon nuts, juniper and other berries (Watkins et al. 1974:187, 242, 244). Even the hard, usually dry ground between the oases grew the edible tuber of Psoralea esculenta (Garrard 1955:244), the Prairie turnip. This was a significant tuberous carbohydrate source which Wedel (1978) doubted grew on the nearby Llano Estacado. The historic habitat of the Prairie turnip is a matter of dispute, with Plains specialists emphasizing its Missouri Valley and more northerly distribution (Kaye and Moodie 1978, 1981; Reid 1977, 1979). They have overlooked, however, Garrard's

eyewitness record of its mid-Nineteenth Century occurrence on the semi-arid uplands between the Purgatoire oasis and nearby ones. His record is an important one, particularly in terms of Reid's (1977:325) hypothesis that Native Americans deliberately reseeded this plant.

During the horticultural or semi-sedentary phase of their activities, Jicarilla Apaches lived in flat-roofed houses with dried earthen walls. These homes they located close to their horticultural fields. They also on occasion built what is best termed a hogan, a structure identical with the typical Navajo dwelling. Moreover, Jicarillas also threw up dome-shaped brush shelters, or cone-shaped, skin-covered tipis (Watkins et al. 1974:88-89). Perhaps the hogan was the type of structure that a Picuris ex-refugee among the Jicarillas referred to as a house "of wood entirely smeared with clay outside..." (Thomas 1935:82). The description which does not specify shape, might refer to wattle-and-daub construction, thus adding yet another possible house type to the Jicarilla inventory. This documented diversity of Jicarilla dwelling types presents a serious challenge to archaeologists interpreting ruined Native American structures.

Relying upon micaceous ceramic pieces to identify southern Athapaskan dwellings yields ambiguous conclusions. The association between these peoples and micaceous ceramic production is completely inferential (Gunnerson 1968) on the one hand. On the other hand, Pueblo potters have been making micaceous utility vessels for hundreds of years (Honea 1973:87), so that micaceous sherds along the Purgatoire River could just as easily be Pueblo trade pot remains as locally made. It is extremely difficult to distinguish micaceous vessels made by Genizaros from Jicarilla products (Skinner 1968:65).

The Apache's semi-sedentary pattern of utilization of the Purgatoire River oasis was well established during the Seventeenth Century. When colonial Spaniards explored the region at the beginning of the Eighteenth Century, they observed Apaches who presumably were the ancestors of later Jicarillas gardening along the Purgatoire River.

Where did the Jicarilla Apache learn horticulture? This is a different question than where did all southern Athapascans learned to cultivate crops. As Opler (1983:370) noted, ritual traits including prayersticks, cornmeal offerings and rain-bringing rituals associated with Navajo and Western Apache horticulture evidence Pueblo influence. One hypothesis has them learning to garden from Taos Indians who fled their pueblo in 1639, following an uprising against colonial Spaniards. Some Taos refugees fled to a riverine Apache rancheria known to Spaniards as El Cuartalejo (Schlesier 1972:104; Thomas 1935:11; Forbes 1963:136-37). New Mexico's Governor Diego de Penalosa claimed to have had El Cuartalejo devastated in 1662 and forced the Taos refugees, whom Juan de Archuleta had not already brought back (Twitchell 1914;II:280), to return to that pueblo (Schlesier 1972:104; Forbes 1960:156-57; Hackett 1937 III:264). The Taos

arose against colonial rule in 1639 because of smallpox epidemic mortality (Hackett 1937 III:108), just as many Native Americans did later during the latter Nineteenth Century (Thornton 1981). They were, therefore, psychologically traumatized, and unlikely candidates to become gardening instructors to their Apachean hosts, as Schlesier (1972:104) concluded: "Here is clear evidence that Pueblo farmers introduced agriculture to Plains Athapascans in the western Plains of Kansas at least by 1639 or 1640..." Instead, the Taos refugees more likely sought out congenial hosts whom they already knew through periodic trading fairs, who already farmed as did the Pueblos.

Why Schlesier should have inferred that the Taos and later Picuris Pueblo refugees must have behaved like agricultural extension agents and taught Apaches to garden is not clear. Schlesier (1972:102) himself recognized that Navajos were already horticulturalists when first specifically identified in colonial documents (Benavides 1945:85-86,89,164). Logically, if the Navajo advance guard of Southern Athapaskan migration southwestward was gardening by 1630 (Hester 1962:62,70), so were the other Southern Athapascans. The Mescalero could possibly have learned to garden from Pueblo peoples: "occasionally, even before the American period, a few families of some of the Mescalero groups practiced a little desultory horticulture" (Opler 1974:207). In contrast, the Lipan lived on the Southern Plains and seldom even traded at eastern Pueblos, so they could hardly have learned to garden from Pueblo peoples. Yet garden they did: "a few families of some of the local groups planted some corn and pumpkins" (Opler 1974:216). The solution to the question as to when Southern Athapascans began gardening is, then, not to be sought or found in post-1639 Pueblo refugee residence among Southern Athapascans who seasonally grew crops in riverine oasis fields.

In mid-1706, Sergeant-Major Juan de Ulibarri set out from Santa Fe to visit the populous Apache region known to the colonial frontier Spaniards as El Quartalejo (Thomas 1935:59). Ulibarri traveled via Picuris Pueblo and Taos Pueblo (Thomas 1935:60-61). He then crossed a drainage divide between the Purgatoire and Canadian Rivers which was called La Jicarilla. From Raton Pass he continued downslope until reaching the canyon and waters of the Purgatoire River. On its banks, "the heathen Apaches of the tribe called Penxayes have much land planted to corn, frijoles, and pumpkins" (Thomas 1935:64). Some of the local gardeners somewhat reluctantly descended from an easily defended mesa to converse with the Spanish commander. Schlesier (1972: 108, fig. 2) located the Penxaye component of the Jicarilla whom Ulibarri visited on the upper portion of the downstream half of the Purgatoire River. If one can trust A.H. Schroeder's reasoning, the rancharia overlooked the confluence of Chicua Creek and the Purgatoire River (Schlesier 1972:110). Ulibarri continued on to visit large Apachean horticultural settlements on the Arkansas River. There he assembled natives of Picuris Pueblo who had fled from colonial New Mexico during the unsettled times several years earlier. The Picuris Pueblo people

returned with the Spanish expedition. Ulibarri reported that the Arkansas River Apaches had by the end of July, 1706, harvested their crops of maize, pumpkins, kidney beans, and watermelons (Thomas 1935:73).

Maize was apparently the main Jicarilla food crop. Its cultural importance appears in Jicarilla belief and behavior. Maize pollen still is the most sacred offering to the supernaturals. Children hold maize ears while listening to the origin accounts "so that they will never forget them." Maize is tied on top of flags used during the ceremonial relay race (Tiller 1983:27).

When Ulibarri reached the Purgatoire River on his return with the Picuris Pueblo refugees, he halted to rest his horses (Thomas 1935:76). At the end of August, 1706, Ulibarri returned to Taos Pueblo.

In 1719, New Mexico's Governor Antonio de Valverde sallied forth toward the northeast and the Plains. He again found Jicarillas living along the Cimarron, Purgatoire and Arkansas Rivers (Watkins et al. 1974:193). Valverde left Santa Fe on 15 September (Thomas 1935:110). On the 21st of that month, Valverde encountered Apache maize fields where the horticulturalists lived in "a small adobe house" (Thomas 1935:112). That same day delegates from the rancheria the Spaniards called "La Jicarilla" visited Valverde's camp. The chief carried a Christian cross.

On 22 September, Valverde encountered more horticultural Apaches on the Cimarron or Rayado Creek. Here, also, some Apache families inhabited adobe dwellings (Thomas 1935:113). The following day, the Spanish governor advanced to the rancheria of La Jicarilla itself. Its leader, known as "The Cripple," was absent in Navajo country. The Apaches told Valverde that Comanches and Utes had attacked their settlement on the very spot where the governor encamped. The Numic-speakers killed 60 people and carried off 64 women and children prisoners. They also burned and destroyed "a little house in the shape of a tower which was there, and even the heaps of maize." Consequently, the Apaches had gone upriver to live for a while (Thomas 1935:115). The Valverde expedition learned about one of the series of Comanche military actions which not long afterwards persuaded the Apaches to abandon their northern territory on the Plains and in riverine oasis and retreat southward.

The Apache report that raiders burned and destroyed one of their towers holds considerable significance for accurate archaeological interpretation of circular structures in the Purgatoire River canyon system and nearby regions. The standard interpretation of stone towers farther west has been that they were built by Navajos or Pueblo refugees. The clear placement of a tower -- evidently a defensive strongpoint -- among the Plains riverine oasis Apaches at a time when Navajos had already differentiated implies that Navajos were not the only Southern Athapaskan speakers who built and used such structures.

On September 25, Governor Valverde crossed the drainage divide and entered the Purgatoire River oasis. "The river was lined with luxuriant foliage and had considerable good water." The Spaniards cut down poplars and alders to obtain firewood to burn to warm themselves. A "norther" numbed all the expeditionaries before they reached the shelter of the canyon oasis. That night it snowed so much that Governor Valverde decided to remain encamped. His men suffered from another complaint that documents another plant present in the oasis vegetation. Some of the Spaniards swelled up with allergic reactions to the poison ivy on which they had lain (Thomas 1935:116).

While riding six leagues from the Purgatoire River to a well-wooded arroyo, Valverde's expedition "caught" so many deer "that the Indians were sufficiently provisioned with good fat meat" (Thomas 1935:117). The abundance of deer and the apparent ease with which they were hunted attests to another natural resource which continually attracted Jicarillas and later other peoples to the oasis and its immediate neighborhood. Not only was venison relished, but buckskins also brought a good return at the Pueblo trade fairs.

Valverde's expedition may still have been within the Purgatoire River canyon system. The next day, 29 September, it rode another five leagues and encountered and reported a type of vegetational community still found in favorable spots in sheltered tributary canyons. Valverde's force reached a pleasant stream "with a grove of plum trees, many willows and many wild grapes..." with easily driven deer not far distant.

At the end of the "Apache Century" on the Southern Plains, Apache military superiority depended upon the horse and lance. It is, therefore, quite surprising that Valverde reported that while his expedition was visiting the main Apachean Plains settlements, his officers "saw the dogs, on which were loaded the poles for tents and other utensils they used" (Thomas 1935:131). This observation hints that Apachean military superiority may have depended upon a relatively small number of warhorses. The Southern Athapascans appear not to have developed the full post-horse Plains cultural pattern. That is, if they still employed dogs to pack tipi poles or pull tipi pole travois in 1719, the Apaches evidently had not made the technological transition to longer tipi poles formed into travois pulled by horses. By 1719, the Apaches may have lacked enough horses to enable them to make that technological change, with its sociological consequences. A scarcity of war horses would have fostered continued Jicarilla reliance upon dogs by differentially distributing the larger animals among families. As among the Blackfeet, poor people were defined as owners of few or no horses. They had to use dogs or carry their goods themselves every time the group moved (Ewers 1943:602-10).

This historical report implies that Apache tipi rings in the

Purgatoire River oasis and neighboring slopes and mesa tops remained comparatively small throughout the entire period of Jicarilla Apache occupation. That is, Jicarilla tipi ring diameter was defined by the length of pole a strong dog could pack or pull. Only later, presumably, did other Southern Plains tribes pitch tipis with larger base diameters, because they had a sufficient number of horses to allow them to employ horses as beasts of burden as well as precious war horses. Following the same interpretation regarding the Comanche (Richardson 1933:25) and Northern Plains peoples by Kehoe (1960) and predecessors, Dormaar (1976) examined differential soil development under tipi ring boulders. He confirmed that precipitation concentrated by the boulders had resulted in deeper change at smaller diameter tipi rings than ones of larger diameter. "Soil transformation cannot be used for the actual dating of tipi rings," in other words, but does date them relatively. Thus, tipi ring diameter clearly is a temporal and may also be an ethnic marker in the Purgatoire River oasis and canyon zone.

THE COMANCHE CENTURY ON THE PLAINS

A.D. 1720 - 1820

Linguistic and historic evidence indicates that the Comanches originated as Shoshonis. The horses they apparently acquired from Ute traders enabled them to enter the Plains post-horse culture area (see Figure 6). Their conversion from a Great Basin to a post-horse Plains tribe seems to have occurred during the latter Seventeenth Century. Comanche oral tradition attributes the division between Shoshonis and Comanches to epidemic disease mortality. During this research, a Comanche elder, Ray Niedo, discussed contemporary oral history regarding this event with Richard Stoffle:

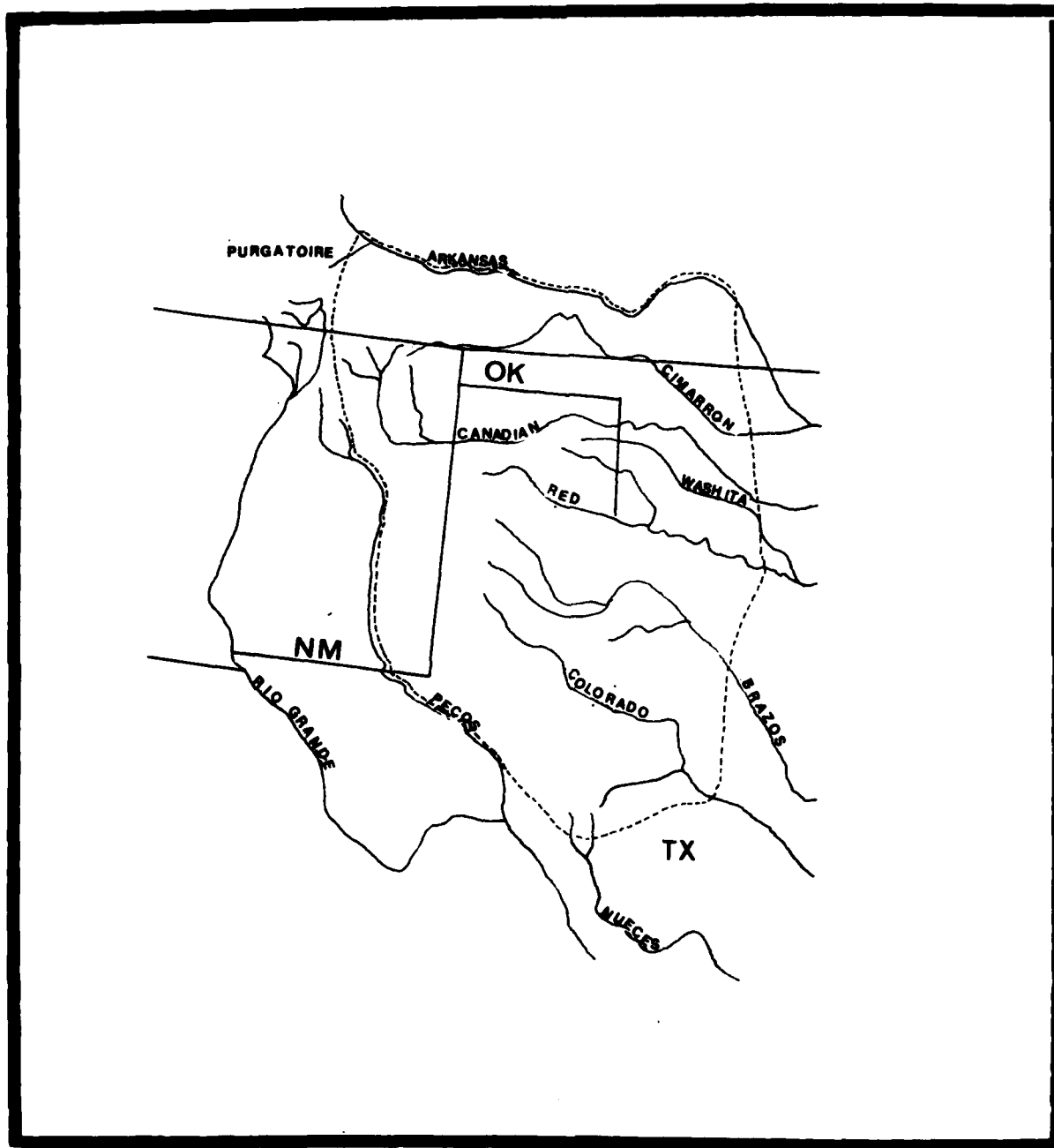
R.N.- See, at one time, that - a - the two tribes, the Shoshones and the Comanches, they're a great nation, and I always figured that was up in through here somewheres. This was a -- the camps -- just as far as you could see, the eye could see. Sickness hit that camp.

R. S.-Sickness?

R.N.- Mm Hmm. You see, coming into the camp, and they was dyin' off like flies. They were one tribe at that time, you know. And so the different parties they got together and they said, 'Well, why don't we just split.' Some went south. Some went north. So, there's your Shoshones and your Comanches (UWP field notes: Tape 17, Side 1; Time 143-199).

Colonial Spaniards in New Mexico Province did not learn about Comanches until the early years of the Eighteenth Century

Figure 6: Comanche Territory



THE COMANCHERIA

(After Wallace and Hoebel 1952:7)

(Thomas 1932:57). They reportedly first traded at Taos Pueblo's fair in 1705, in company with Utes (Schlesier 1972:112-13; Bolton 1950:73; Thomas 1932:57). As stated earlier, Utes then occupied the San Luis Valley. There is, therefore, little reason to suppose, as did Schlesier (1972:113) that Comanches "must have taken up a position in the Plains of eastern Colorado at least by 1703..." On the contrary, there are at least two good reasons for inferring that Comanches lived elsewhere. Their appearance at the Taos trading fair with Utes points logically to Comanche co-residence with Utes in San Luis Valley, or farther north on the western side of the Rocky Mountain front range. On the other hand, Comanche access to French traders or to ethnic groups on the Prairies with direct trading relations with Frenchmen, strongly suggests that the Comanches were already resident on the Plains, but in the Central Plains and far enough east to obtain French trade muskets. The Comanches are, in brief, just as likely to have left the "Dismal River" (a tributary of the S. Platte) artifacts Gunnerson (1960) and others have attributed to Apacheans as are the latter. Correlating artifacts with ethnic groups in areas where human migration is known to have been long-term and frequent is at best uncertain. The Apache correlation with Dismal River 1675-1730 remains certainly cannot be taken as demonstrated. In fact, the chronology of Apachean collapse in 1718-1720 on the Arkansas River and its tributaries, and Comanche southward migration into recently vacated territories would favor concluding that Comanches, not Apaches left the Dismal River about 1730.

By 1706, the Comanches were militarily powerful enough to raid Jicarilla rancherias south of the Arkansas River. Sometime during the half-decade, Comanche and Ute emissaries negotiated peace with the New Mexican Spaniards (Thomas 1935:27).

In 1716, however, Comanches raided Taos Pueblo and nearby settlements. Captain Christoval de la Serna pursued these raiders and engaged them 30 leagues north of Santa Fe -- 75 to 90 miles. He killed some and captured the others, selling them into slavery farther south in New Spain. By that time, the Comanches had a goodly supply of French firearms, and they were winning a series of strategic victories over Plains Apaches. In 1718, the Jicarillas collapsed and retreated into colonial Spanish territory. In fact, the Jicarilla and remnant Apache bands no longer provided a buffer between colonial New Mexico and aggressive Southern Plains warriors. Comanches raided Taos and Cochiti Pueblos in July of 1719 (Thomas 1935:27). Traveling southward to raid pueblos, the Comanches crossed high passes and mountain slopes. They reportedly built uniform piles of stone at intervals of 50 and 100 yards along one section of trail in the upper Canadian River drainage to facilitate their safe return should snow cover the trail (Garrard 1955:159). Similar trail markers may be found or formerly existed in the Purgatoire River headwaters.

Spanish proposals to establish military posts on the Arkansas and Cimarron Rivers to protect the province from

Comanches and Frenchmen came to naught. In 1724, Comanches attacked the Jicarillas, killing or capturing all but 69 men and women and three boys (Thomas 1932:58). The Jicarillas became frontier tribal allies of the Spaniards, dependent on the colonial authorities for some protection and supplies. By 1733, many Jicarillas were in effect refugees on the Trampas River and at Pecos Pueblo (Thomas 1932:58,96-97), the "Eastern Gateway" trading center (Ewers, 1954: 429-46). Earlier the gateway to the Puebloan market had been Picuris (northern), Pecos (northeastern), Pueblo de los Jumanos (southeastern), Oraibi (western) and Hawikuh (southern).

That the Penxaye formerly residing on the Purgatoire River, the Flechas de Palo Apaches, "...may have joined the Jicarilla" (Schlesier 1972:116) reflected both Jicarilla forced migration and depopulation by Comanche raids and probably epidemic disease which spread widely among Plains peoples in 1717-19. Variation in Apachean colonial appellations also reflected Spanish uncertain knowledge of actual social structure and native self-names. One cannot correlate the Paloma with the Pelones as did Schlesier (1972:125) on the basis of presumed resemblance in terms. Both words are Spanish, not Athapascan, and they have quite different meanings. They had as little to do with aboriginal social units as the "Come Nopales" or Prickly-pear cactus fruit Eaters, and the "Come Caballos" or Horse-Eaters. Apachean bands ranged over extensive territories after 1720, in order to exploit game and wild plant foods in different environmental niches, and stay out of the way of hostile raiders, either Spanish or Native American.

The period of Comanche expansion after 1718 coincided with a steady westward advance by French traders. The latter edged up the Red River between 1710 and 1720. They went up the Missouri River soon after 1720. In 1739, a French trading party ascended the Platte River and turned south to New Mexico. About 1740, the Comanches forged an alliance with Caddoans. They exchanged horses, mules, hides, meat and captives for guns and ammunition which made them militarily superior to Apaches (Secoy 1953:82). By 1746, the Comanche territorial conquest of the Arkansas River region was secure enough for the tribe to allow French traders to use that valley as a route to New Mexico. Comanches turned their French firearms on colonial Spanish and Pueblo settlements (Thomas 1932:59). Comanches struck at Pecos Pueblo in June of 1746, killing 12 people. The raiders hit Galisteo Pueblo and other settlements. Assembling a force of over 500 soldiers and auxiliaries, Governor Joaquin Codallos y Rabal engaged a Comanche-Ute force beyond Abiquiu. The colonists killed 107 and captured 20 Utes and Comanches (Bancroft 1889:249). Joint Ute-Comanche operations suggest that the southeasternmost Muoache Utes ranged eastward across the Sangre de Cristo range into the Purgatoire River Valley.

The Spaniards had already exacted five-fold vengeance on the Comanches who had raided Pecos Pueblo. Lieutenant Governor Manuel Saenza de Garvisu pursued the raiders with 50 Santa Fe

presidial troopers, some civilians, and Pecos and Galisteo Pueblo Indians. They caught the raiders, who were slowed by their captured horse herd. The colonial force killed more than 60 Comanches, but lost nine soldiers and one civilian. The viceregal head of military affairs in Mexico City criticized the New Mexican officials for not achieving better than a 6:1 kill ratio (Kessell 1979:372-73).

The Spaniards enjoyed better success with Utes. Allied with Comanches until 1747, the Utes broke with them by early 1749 and sought peace with Spaniards. Governor Codallos attacked them near Taos (Thomas 1940:29-30). The Utes tried again in mid-August, 1752, at San Juan Pueblo. Three Ute chiefs brought a Franciscan calendar some Navajos they claimed to have defeated put on a cross to sue for peace. The Navajos represented it as a letter from the governor commanding intertribal friendship (Thomas 1940:117). The chiefs led 100 tipis of Utes ready to trade with pelts and a Kiowa woman they had captured from Comanches (Thomas 1940:122). The Utes thereafter traded horses, hides and Paiute captives for maize, Navajo and Spanish blankets and ceramics at Abiquiu and Taos Pueblo (Abbott et al. 1982:29; Stoffle and Dobyns 1983).

The refugee Jicarilla Apaches also aided Spaniards and Pueblos to resist advancing Comanche raiders migrating southward from the Purgatoire River zone. Messengers summoned Spanish aid from Santa Fe. Toward sundown on a cold winter Saturday 20 January 1748, a messenger delivered the Pecos missionary's note to Governor Codallos. The drum beat brought out only 25 soldiers and civilians. Codallos sent 10 to collect horses, and himself set out with 15 for Pecos Pueblo, which he reached about 2:30 a.m. on Sunday the 21st. The Governor ordered women, children, and older men to the sheltered roof tops and mobilized about 70 younger warriors including some Jicarilla refugees. Daring to leave the gate open, Codallos staked his defense upon superior firepower in an enclosed space (Kessell 1979:374-75). Codallos waited until the Comanches were within pistol-shot range. Then his gunners volleyed, and the auxiliaries wielded lances and fired their arrows. The startled Comanches withdrew; the defenders had lost but one Jicarilla. Some old Pecos men assigned to guard the priest slipped out to see what had happened, and the Comanches rode down 11 of them. Spanish and Comanche reinforcements arrived more or less simultaneously. The raiders withdrew (Kessell 1979:376). At this time, Spanish provincial officials again commented on the diversity of traditional Jicarilla house types: "Houses, palisade huts and other shelters" (Thomas 1935:46).

As they advanced southward, ousting the Apacheans from Plains territory, including the Purgatoire River canyons, Comanches began trading at the periodic fairs at some frontier pueblos. In the aftermath of the Pecos and Galisteo Pueblo raids, the Viceroy ordered a junta to decide whether Comanches should be permitted to continue trading at the Taos Pueblo fair. Those participating recognized that the Comanches were not

reliable trading partners. On the other hand, they brought to the fair: skins, meat, and horses eagerly sought in New Mexico. The fact that New Mexicans obtained horses from Comanches indicates the importance of mounts as commodities in international commerce. A majority of the junta's participants argued to continue trading with Comanches at the Taos Pueblo fair. The majority even dared to urge that purchasing human captives the Comanches took to the fair saved them from death and exposed the Comanches to Christian influence. Governor Codallos endorsed the majority decision (Bancroft 1889:249-59).

The Spaniards and Comanches maintained a mixed warfare and commercial relationship. The Comanches evidently used the Purgatoire River canyons as a staging area for their journeys to and from the Taos Pueblo fairs. This appears from the military pattern Spanish punitive expeditions followed. In 1750, Lieutenant General Bernardo de Bustamante y Tagle chased Comanches down the Arkansas River. In 1751, about 300 Comanches traded at Taos. Then they attacked Galisteo Pueblo, and Governor Tomas Velez Cachupin gave chase. The Spanish force caught 145 Comanches in a wood on the Arkansas River. Setting fire to the vegetation, the Spaniards killed 101 Comanches and captured the rest (Thomas 1932:60). The Purgatoire River oasis had clearly passed into Comanche hands.

By 1760, the montane Jicarilla band lived near Santa Domingo Pueblo, ranging northward along the western slope of the Sangre de Cristo range. The Plains band Jicarillas were at that 1760s period still living near Pecos Pueblo (Schlesier 1972:126; Lafora 1958). The Jicarillas stayed in and near their pre-colonial habitat by maintaining a military and economic alliance with Spaniards and Pueblos. More distant Apachean groups were less successful in trading with Spaniards and maintaining peaceful relations with them.

In 1762, Governor Velez Cachupin negotiated a peace with the Comanches which lasted for half a dozen years. In mid-1768, Governor Pedro Fermin de Mendinueta defended the Ojo Caliente area against the Comanches but was too weak to pursue them. In mid-July, however, the Governor pursued Comanches down a little stream which emptied into the Arkansas River -- perhaps the Purgatoire River. The Spanish 456-man force included both Apaches and Utes (Thomas 1932:61). The colonial policy-makers appear to have been able to split the Muoache Utes from the Comanches. By this time the Jicarillas, or a major contingent of the ethnic group, spent the summer horticultural season at least gardening on small creeks between Picuris and Taos Pueblos. They were firmly allied with the colonial Spaniards, and rather well-integrated into the provincial socio-political systems (Gunnerson 1974: 238-46; Adams 1953-54).

On 3 February, 1771, Governor Fermin de Mendinueta issued a broadside announcing conclusion of a peace treaty with the Comanches (Bancroft 1889:259). Peace lasted less than a year and a half. On 4 July, 1773, 500 Comanches raided El Valle, only 15

miles from the provincial capital, Santa Fe (Thomas 1932:61).

Comanches raided New Mexican settlements five times between June and September, 1774. They struck Picuris, Nambe and Pecos Pueblos and twice raided Albuquerque. Carlos Fernandez led 600 soldiers, citizens and auxiliaries on a retaliatory expedition. Some 50 leagues east of Santa Fe, Fernandez attacked an 80-lodge encampment. Eighteen lodges fled; the others fought around a pond. The governor estimated that 400 Comanches were killed or captured; captives numbered 115 women and children (Thomas 1932:62-63).

During these years, Comanches continued migrating southward, displacing Southern Athapascans from the Southern Plains. Spaniards fought some Apaches and allied with others, such as the Jicarillas. A general Spanish campaign against the Apaches placed the latter at heightened risk from Comanche warriors. One Apache group that Spanish troops chased into the Colorado River area of Texas was wiped out save for one Apache and a Spanish captured by Comanches who killed 300 families (Thomas 1932:64).

Spaniards and Apaches confronted hostile ethnic groups on virtually all sides. This was the frontier situation when the brilliant Creole officer, Juan Bautista de Anza, arrived in New Mexico as its new governor late in 1778. On 15 August, 1779, Anza led a 573-man expedition northward toward the Comancheria of this period. Earlier colonial thrusts, including those already mentioned, usually crossed the southern Sangre de Cristo range and descended along the Purgatoire River to the Arkansas, or followed one of its southern tributaries to the mainstream. Anza rode approximately due north through the San Luis Valley and only turned east toward the Plains north of the Arkansas River near Pike's Peak, descending Fountain Creek to the main stream. While still west of the Sangre de Cristo range, Anza crossed a Ute-Comanche battlefield littered with bodies of Comanches slain on 10 July (Thomas 1932:67). The western slope lay within southeastern Ute territory. The Comanches slain were horse thieves who drove off Ute horses under cover of darkness. Pursuing them, the Utes killed a dozen Comanches and recovered their horses (Thomas 1932:127). The events suggest that the Sangre de Cristo mountain summit divided the Ute from Comanche territory in 1779, although Muoaches no doubt ranged into the Purgatoire River oasis to hunt and gather if to not garden. Their hunting territory extended eastward well into modern Kansas (O'Neill 1972:XI-6).

Whether the mountain summit divided the 1779 Plains culture area from the 1779 Great Basin or Circum-Pueblo culture area is another question. Inasmuch as the Comanche raiders attempted to steal Ute horses, the latter plainly were effectively equestrian at the time. Cultural pattern rather than topography defines a culture area, by 1779, therefore, the post-horse bison and other big game hunting culture area extended west of the Sangre de Cristo range, including the southeastern Utes. Consequently taking such a view of the culture area concept one perceives that

the Purgatoire River canyon lay well within the post-horse, bison-big game hunting culture area. This cultural view avoids overemphasizing environmental causation (Hoebel 1977:7), and recognizes that the post-horse big game hunters also ranged over much of Idaho and Utah (Hoebel 1977:10) as well as Colorado. To the extent that the Muoache Utes may have been horticultural, their territory formed a portion of the post-horse Circum-Pueblo culture area.

Crossing the mountains just south of Pike's Peak in 1779, Governor Anza posted sentinels on heights overlooking the adjacent High Plains. On 31 August about 10:30 a.m. they sighted dust of Native Americans moving on the Plains. Anza resolved to attack, and about noon began closing. More than 120 Comanche families fled the Spanish charge -- men, women and children all being mounted (Thomas 1932:130). The 120 family count was accurate, (assuming each family had a tipi) because the Comanches abandoned that many tipi frameworks they had set up when their sentinels discovered the colonial force. During a running fight covering two to three miles, the Spaniards killed 18 and captured 30 women and children, along with 500 horses (Thomas 1932:131).

The captives informed Anza that they had been traveling to meet Chief Cuerno Verde (Green Horn) probably the foremost Comanche military leader of that time. Governor Anza set out on Cuerno Verde's trail, hoping to encounter him. On 2 September, Anza descended Fountain Creek to the Arkansas River and crossed to the south side. At this point, the majority of the Utes who were riding with the Spaniards left without notice (Thomas 1932:132). Anza's expedition was near the Purgatoire River when the Utes decamped, but not yet on it. The Ute departure probably signaled that they perceived themselves as outside their tribal territory, at risk in the Comancheria. Inasmuch as Anza had just engaged Comanches farther north, and Comanches had been raiding New Mexican Pueblos annually for some time, the Comancheria clearly included the Purgatoire River.

Governor Juan B. de Anza's luck held. Late on 2 September, 1779, his scouts discovered a Comanche group approaching unaware of the colonial contingent in its territory. At sunset, Anza charged the Comanches. Wheeling about, they fled Anza's double columned charge. The colonial cavalry killed but eight Comanches, wounding others (Thomas 1932:133). The Sonoran Desert native kept his men standing to arms even though it rained all night and the cold was severe. At seven in the morning of 3 September, Anza rode ahead, making for some woods the Comanches held. Some 40 Comanches in front of the woods included the famous Chief Cuerno Verde, who rode ahead, making his warhorse curvette. Anza, in his own words, "determined to have his life and his pride and arrogance precipitated him to this end" (Thomas 1932:134). The Spanish governor planned a half-circle formation, but Chief Cuerno Verde quickly recognized Anza's battle plan and retreated safely. Anza then deployed his cavalry in columns and cut off Cuerno Verde and his immediate followers from the main Comanche force. The Indians dismounted and took cover behind

their horses, but Anza's forces slew Cuerno Verde, his eldest son, four leading chiefs, a medicine man "who preached that he was immortal, and ten more" (Thomas 1932:135). Cuerno Verde's bravado proved his undoing. Anza ascribed his temerity to "arrogance, presumption and pride" (Thomas 1932:136). Actually, Cuerno Verde's battlefield behavior corresponded to the ideal war chief behavior of the post-horse, war-oriented "Plains" cultural pattern. The "nineteenth-century horse cultures" (Hoebel 1977:18) with their emphasis on personal bravery in battle appear to have existed among Comanches by 1779. The medicine man's preaching that he was immortal may also indicate that Comanches were affected by a millenarian movement at the end of the 1770s (Dobyns and Euler 1967; Mooney 1896; Thornton 1981).

Waiting until 10:30, Anza rode south to the first stream he identified as flowing from the Sangre de Cristo mountains (Thomas 1932:136). Greenhorn Creek in Colorado presumably preserves Cuerno Verde's name (Lecompte 1978). On 4 September, Anza's field force climbed a pass in the range to regain its western slope and the trail to Taos (Thomas 1932:137). Ute war parties harried Comanches after Anza's return to Santa Fe. Those who parted company with Anza on the Arkansas River killed 16 Comanches and captured 40 horses on their way home (Thomas 1932:70-71).

Spanish involvement in the Revolutionary War between England and its North American colonies seriously handicapped colonial military action on New Spain's northern frontier for several years. After the 1783 Treaty of Paris, however, Spain rapidly built up its power on that frontier.

Spanish authorities in Louisiana armed Caddoan and other tribes which attacked Comanches and Apaches. This pressure on the eastern side of the Comancheria resulted in 400 Comanches seeking peace at Taos Pueblo on 12 July, 1785. Other groups soon inquired whether the peace Governor Anza granted them was general. These were southern Comanche bands whose members described the Yamparica and Yupe as living north of the Arkansas River. The peaceful group traded at Taos's late October fair, offering bison meat and returning two captives (Thomas 1932:72). The traders belonged to the Cuchantica or Bison Eaters Band, which consisted of eight encampments containing an estimated 6,000 to 7,000 persons (Thomas 1932:73).

Representatives of the various Comanche encampments conferred on the Arkansas River and agreed to seek a general peace with New Mexican Spaniards. In late January, 1786, a leading chief called Ecuaracapa told Governor Anza that he represented all Comanches. He agreed to remain at peace unless a council of leading men opted for war. He requested permission to move near Spanish towns and that Pecos Pueblo be opened to free trade by all Comanches. He agreed to fight Apaches in the Spanish interest. Although Ute chiefs had earlier opposed any Spanish peace pact with Comanches, Ute leaders now embraced Comanche chiefs and symbolically joined in the peace agreement

(Thomas 1932:75).

An important aspect of the peace agreement was that it opened Pecos Pueblo to Comanche traders and observed a schedule of prices Anza set to restrain Spanish and Pueblo greed. During a fair Anza personally opened on 1 March, 1786, Comanches exchanged over 600 hides, numerous pack-animal loads of meat and fat, 15 horses and three firearms (Thomas 1932:76-77). Yupe and Yamparica Comanches visited Taos Pueblo, continuing on to Santa Fe at Anza's invitation. He confirmed to them the general peace accord.

Anza achieved what no earlier Spanish governor of New Mexico had -- an enduring peace with Comanches. It lasted a full generation, until the abortive 1810 Hidalgo revolt against Spanish rule (Thomas 1932:83). The pacification of Spanish-Comanche relations significantly stabilized the Comancheria. At least, the Comanches did not militarily press against colonial Spanish territory and settlements, nor against Apaches once the latter sued for peace following 1786 (Dobyns 1976).

Late in the colonial era, New Mexican officials attempted to forestall United States expansion by winning more native customers on this provincial frontier. In 1805, they sought to entice Pawnees to trade at Santa Fe (Loomis and Nasatir 1967:426). Pedro Vial left Santa Fe on 14 October with Frenchmen who had made their way to New Mexico (Loomis and Nasatir 1967:433). Following the long established trail via Vermejo River, Vial struck the Purgatoire on 2 November (Loomis and Nasatir 1967:434). He descended to its mouth, reaching the Arkansas River on 5 November, finding a footpath worn into the north bank. Hostile people attacked the explorers (Loomis and Nasatir 1967:435). The assailants all had guns and fought both mounted and afoot. Vial and his companions discreetly retreated the way they had come (Loomis and Nasatir 1967:436).

Great Plains tribal territories did not remain stable throughout the Spanish colonial period. Arapaho, Cheyenne, Pawnee, and Kiowa warriors pressed against the northern frontier of the Comancheria. They did to Comanches by about 1821 what Comanches had done to Apaches by 1718.

The skin tipi furnished a portable dwelling for the post-horse bison-big game hunting peoples who gathered roots and berries but did not fish or garden. Horses hauled tipi poles in travois form (Hoebel 1977:9). As already mentioned, the post-horse tipi poles horses pulled were longer than pre-horse poles dogs packed or pulled. The tipi pole framework was, moreover, not uniform. Both Utes and Comanches erected four-pole tipis, but Arapahoes and Cheyennes reportedly used only three poles (Trenholm 1970:66). A mid-Nineteenth Century visitor to the latter peoples counted 17 poles (Garrard 1955:52). An army officer who examined Comanche tipis in Texas in 1852 found 8 to 10 poles, which the Comanches had to haul into their largely

treeless habitat (Marcy 1859:141). Thus, archaeologists analyzing stone tipi "rings" where tents once stood can possibly differentiate Ute and Comanche encampments from Cheyenne and Arapaho camps in the Purgatoire River canyons. Granted that rocks were disturbed when women struck their tipis, the more or less circular pattern of stones might still reflect the differences between eight and seventeen-pole cover supporting (increasingly circular), original tipis.

PAWNEE RAIDING

The Pawnees were semi-sedentary, inhabiting riverine oases draining into the western side of the Mississippi River. They were active traders and highly skilled artisans, who carved the most striking stone pipes made on the Plains (Ewers 1979). Early during colonial times, Pawnees began raiding Spanish frontier settlements for horses and metals. They also on occasion captured Spanish prisoners. In 1820, an Anglo-American trader visiting the Pawnee villages 100 miles west of Council Bluffs met a 10-year old boy and his father whom a Pawnee raiding party had captured hunting on the southern Plains the year before (Meriwether 1965:80-81).

The older Spaniard showed some gold dust to the trader, motivating an army-inspired and trading company financed reconnaissance to New Mexico. A Pawnee chief, Big Elk, led 17 warriors to escort the trader and his black cook to the Arkansas River. Crossing into New Mexico, the party halted while the Pawnees killed some bison on the Plains. They then smoked the meat on a quickly erected smoking rack. "Having cured what we supposed would be sufficient for our return trip, we found a small cave in the rocks, where we concealed our meat, and, blocking up the entrance with large stones...we resumed our journey" (Meriwether 1965:84). Whether this Pawnee party was in one of the Purgatoire River canyons or not, the meat-drying and storage techniques were undoubtedly employed not only by Pawnees but other Native Americans utilizing Purgatoire River water.

A small cave or rock shelter blocked with stones in a dry masonry wall would exhibit little evidence of use once a cache was removed. The drying rack probably would be discerned only by accident and with much good luck. The drying fire was "small" so the amount of charcoal created probably was not great. The drying rack was built by driving forked sticks into the ground in parallel rows some three feet apart and 20 to 30 long. Small poles resting in the forks created the rack, and the Pawnees cut straight, slender willow branches on which to skewer butchered meat and hold it on the cross-poles (Meriwether 1965:83). Thus, the uprights were the only structural elements which left physical marks on the land.

Such a drying rack would be quite conspicuous were the post-molds and charcoal found. Two parallel rows of post-holes

20 feet long and a yard apart with a line of charcoal between would clearly differentiate the drying rack remains from tipi rings and other arrangements of unright posts.

Returning to the Pawnee villages, the few survivors of a Mexican attack on the Pawnee escort concluded that they had best encamp for the winter. They selected a sheltered spot on some tributary of the South Fork of the Platte River, but their behavior illustrates one kind of emergency dwelling archaeologists can expect to find in the Purgatoire River canyons.

The first consideration was a water supply. The group located a small spring on the premise that a spring never freezes. Next the party encamped where there was sufficient firewood to warm it through the cold weeks. Third came protection; the camp was in "a steep hollow" where the full force of wind could not lower the temperature with a large wind chill factor. The party selected "a shelving rock which projected six or eight feet from the wall beneath." Using tomahawks, the men cut "slender poles" eight to 10 feet long, leaning them against the shelving rock. The butts merely rested on the ground. The party killed its mounts, skinned them and stretched the skins across the poles, tying them with rawhide strips cut from the legs. Thus, they created a shelter 15 to 20 feet long and eight to 10 feet wide which left no enduring traces. They improved a natural crevice in the rock by stacking loose rocks to form a chimney about two feet high (Meriwether 1965:99). An archaeologist would need a very sharp eye and powerful imagination to visualize such a temporary winter dwelling from a two-foot high stack of stones.

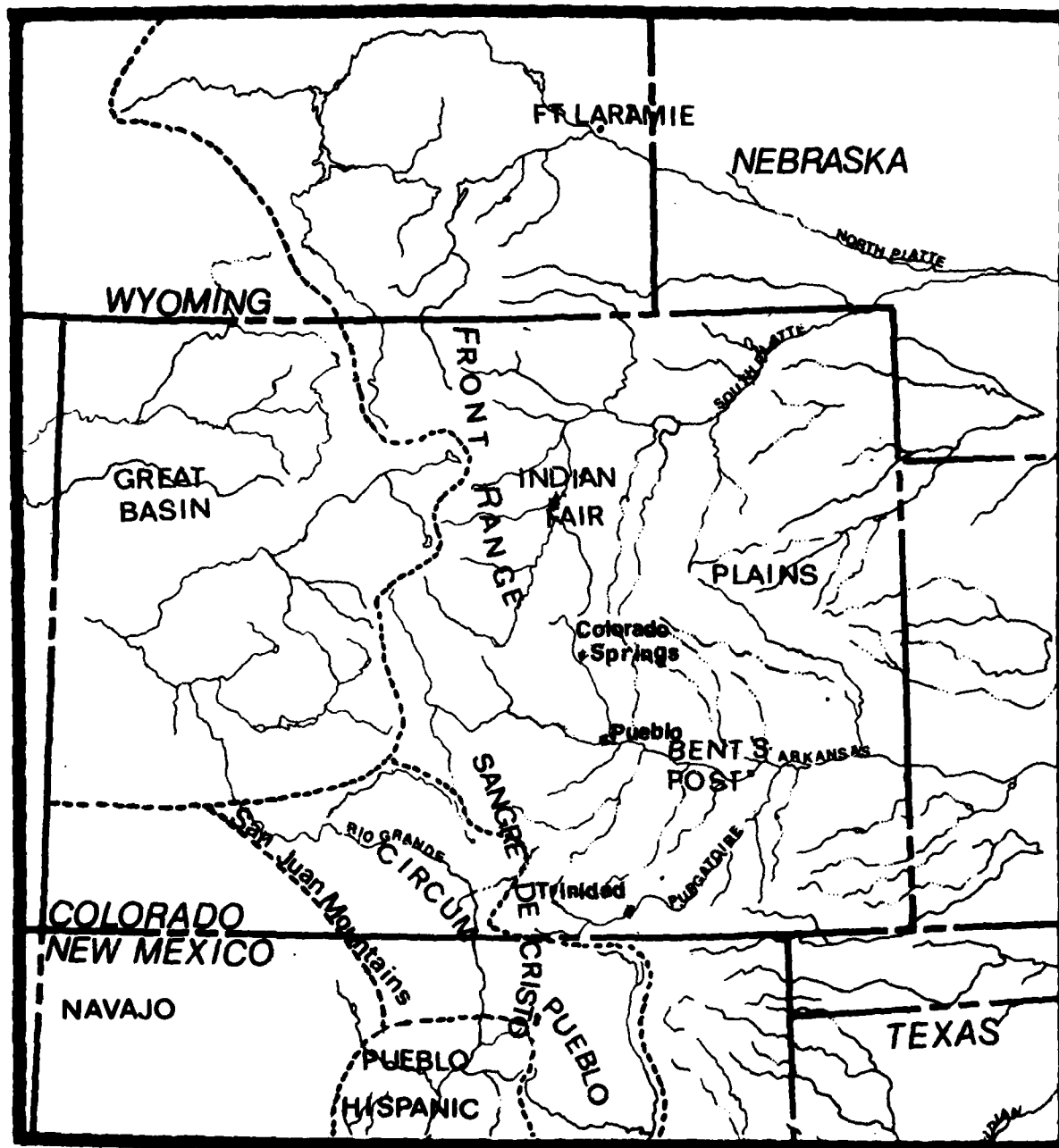
THE TRADING POST ERA, A.D. 1820 - 1870:

HALF A CENTURY OF INTERETHNIC TURMOIL

A.D. 1820 - 1850, THE MEXICAN PHASE

The Southern Athapascan peoples were able to dominate the Southern Plains for approximately one century, although military pressures mounted steadily during the latter half of that period of hegemony. The Comanche bands were also able to dominate the Southern Plains for about one century, A.D. 1720 - 1820. Again, military pressure steadily mounted during the latter half of that period. The successful revolution of English-speaking colonists on the Atlantic seaboard and the establishment of the United States of America generated far reaching changes in interethnic relationships between Native American peoples as distant as those utilizing the Purgatoire River (see Figure 7). When a written constitution defined the powers of a central government, its drafters empowered a National Congress to regulate citizen commerce with Indian tribes. The entire enumeration of national

Figure 7: Indian Trading Post Culture Area



Scale
0 100 Miles

Based on
National Geographic Society, 1978.

governmental powers strongly encouraged commerce of all kinds.

That encouragement of commerce generated rapid trader penetration of the Great Lakes region on a scale previously unknown. Soon technological improvement in lacustrine and riverine transportation -- successful harnessing of steam engines to paddle wheels on boats -- accelerated communication and greatly expanded tonnage of goods transported within a politically unified, expanding trading area.

European geopolitical maneuvers also influenced the peoples using the natural resources of the Purgatoire River canyons. Early in the Nineteenth Century, Spain transferred Louisiana to France, and the Emperor Napoleon in 1803 sold the province to the United States. In 1819, when the United States purchased Florida from Spain, the Adams-Onis Treaty defined the southwestern United States boundary with New Spain. It followed the Red River to the 100th meridian where it turned north to the Arkansas River, which it followed upstream to its source (Abbott et al. 1982:34); therefore, the United States frontier reached the Arkansas River. The Purgatoire River south of the mainstream remained in Spanish territory, becoming part of Mexico when that nation became independent in 1821. The latter political event quickly resulted in a pronounced change in culture area.

Englishmen had long lusted for the mineral riches of colonial New Spain. Their United States heirs also perceived New Spain and subsequent Mexico as rich in precious metals. In 1806, Lieutenant Zebulon Pike explored the Arkansas River for the United States. He forded the Purgatoire River on Spanish territory, following a no doubt well marked trail Native Americans had long since created. He was arrested and deported (Lavender 1954:14). United States merchants eagerly sought to trade with inhabitants of the area. Spain prohibited international trade across the Arkansas River frontier. Nevertheless, Spanish traders from New Mexican settlements conducted trade fairs at the confluence of the Purgatoire River with the Arkansas River. There they met various Plains tribes to exchange commodities. The presence of beavers on the river is documented in an 1818 use of Las Nutrias (the beavers) as a place name (Weber 1971:30; Marshall 1928:9; Thomas 1929:148-49,161).

The Spanish and later Mexican traders offered the Plains tribes not only manufactured goods -- which were in scarce supply in New Mexico -- but agricultural produce. They continued, in other words, the symbiotic relationship between sedentary Pueblo horticulturalists and specialists in hunting and meat and pelt processing that had existed during prehistoric times. The New Mexicans brought maize, pumpkins, and pinole to the Purgatoire River-mouth fairs, to exchange for non-agricultural commodities. Later, Mexicans brought these same commodities to the south bank of the Arkansas River opposite Bent's Fort, and to nearby Indian villages (Garrard 1955:68-69).

Mexico did not prohibit trade with foreigners, so Missouri

traders reached Santa Fe and then Chihuahua City soon after Mexico's independence. Thomas James (1846:149) for example, entered Santa Fe on 1 December, 1821, via Pecos Pueblo and Comanche camps on the Southern Plains. Renting a house, James took in \$200 in two weeks. Comanche Chief Cordaro with a 30-warrior delegation called upon Mexican officials in mid-January, 1822, and sought from James a letter to the United States commander at Natchitoches (James 1846:151-52), indicating the width of Comanche range. The Purgatoire River system had by 1821 become peripheral to Comanche territory.

Residents of Santa Fe, roughly 6,000 in number, formally celebrated Mexican independence on 5 February, 1822 (James 1846:152-58). Toward the end of that month, a Ute delegation of 50 mounted men rode into the city on magnificent horses -- "the most elegant horses I had ever seen", wrote James (1846:160). Speaking fluent Spanish, the young Ute chief invited United States traders to Ute country. "We have horses, mules, and sheep," said the chief, holding out the temptation of the most valuable commodities entering multi-ethnic trade. He added: "The beavers in our country are eating up our corn. All our rivers are full of them" (James 1846:160). Thus, he tempted traders with the other valuable international commodity, beaver pelts. When he complained about beavers eating Ute maize, the chief also indicated that his tribesmen properly are to be classified (at least during this time period) with the other Circum-Pueblo peoples along with the horticultural Apaches and not as either Great Basin or Plains non-horticultural peoples.

United States traders followed extant trails between riverine Missouri settlements and Santa Fe, New Mexico. The famous Cimarron cut-off of the "Santa Fe Trail" crossed the Arkansas River international boundary downstream from the mouth of the Purgatoire River. The longer but better watered branch followed the Arkansas River upstream to Fountain Creek, then widened the ancient footpath across the Purgatoire River headwaters to Raton Pass. The pioneering Becknell pack train ascended the Purgatoire River itself between the later roads (Hulbert 1933:61). The moment the first United States traders returned to Missouri with news of high profits, a permanent trade was founded (Abbott et al. 1982:35). The traders traveling along the Santa Fe Trail attracted Native Americans from many tribes who sought to exchange commodities with them, or raid their horses and mule herds and sometimes attack and plunder their wagon trains.

The attraction of southward moving Plains peoples to the New Mexican frontier along the Purgatoire-Arkansas Rivers suggests that life in their culture area was not entering a "Golden Age of thirty or forty years of untrammelled freedom," (Gladwin 1957:112) as theoreticians have all too frequently assumed. Instead such trading relationships usually involved the transmission of Euroamerican diseases, alcohol, and dependency upon trade goods and externally established markets.

After 1821, the Arkansas River frontier was no longer only a Native American post-horse bison-big game hunting culture area sector. It became a Euroamerican-Native American trading culture area, constantly changed by Euroamerican immigration which increased Euroamerican demographic, military, commercial, and social domination of tribal peoples.

St. Louis traders, in 1815 staged a preview of United States expansion into the Upper Arkansas River region. The leaders of that group in 1816 employed 45 men to trade with Arapahoes and other tribesmen gathered on Cherry Creek, near modern Denver, Colorado. Arapahoes and Kiowas brought horses north to the fair, and were identified as residents of the Arkansas River area (Trenholm 1970:41).

Not only did Euroamerican commerce over the Santa Fe Trail begin in 1821-1822, so did Euroamerican colonization of the Arkansas River oasis. A trading party met the Arapahoes on 23 November that year. The following year, Jacob Fowler of this party constructed a log cabin on the Fountain River tributary on the north or United States side of the international boundary. The Arapahoes offered few beaver pelts and some horses to trade (Trenholm 1970:44). The horses were the enduringly valuable commodity whose husbandry and exchange -- and theft -- effectively integrated Native American peoples into the world market economy via trading posts and itinerant traders ranging out to fairs.

Travel across the southern Plains could be dangerous. In 1826, Pawnees seized mules, horses, and clothing from New Mexicans hunting bison on the Plains. They also stole horses and mules from the Rio Grande Valley near Santa Fe itself (Hulbert 1933:168). Although the Purgatoire River oasis was far southwest from Pawnee settlements, they were not strangers to it.

Still other traders entered the region. In 1828, Ceran St. Vrain established, with Charles and William Bent, a small trading post at modern Pueblo, Colorado. Epidemic smallpox threatened the venture (Trenholm 1970:49). They stored merchandise there which petty traders then carried on pack animals to distant Native American settlements (Lavender 1954:131). Supplying tribesmen with metal blades and utensils and firearms, the trading post kept them commercial hide hunters (Turner 1891:77), prone to overhunt the very game animals upon which their livelihood depended (White 1983:97,200-02).

The late Spanish colonial period trading fairs conducted at the Purgatoire River-Arkansas River confluence meant that the oasis was known to numerous wide-ranging trader/trappers. Leaving the Snake River winter encampment on 25 December, 1831, John Gantt reached Taos on 29 January, 1832. Swapping beaver pelts for mules, he wrote to the provincial governor about constructing a trading post at the Purgatoire-Arkansas confluence. He anticipated obtaining supplies from Taos (Weber 1971:202). That spring, Gantt and his party trapped beaver in

tributaries of the Arkansas, of which the Purgatoire was the major southern stream and only permanently flowing one. Gantt's trapping probably resulted in a distinct change in the riverine oasis environment by removing much if not all of the beaver population. That undoubtedly led to later beaver dam collapses, pond draining, and eventually channel erosion (c.f. Dobyns 1981; Stewart 1980).

As late as the fall of 1846, however, the meadow near the mouth of the Purgatoire River still contained a marsh. The rushes growing there provided nourishing browse for livestock, in spite of the frequent passage of wagon trains and riders over the branch of the Santa Fe Trail which followed the north bank of the Arkansas River (Garrard 1955:46).

Native American use of fire also affected the Purgatoire River canyon vegetation. Utes reportedly frequently set defensive fires. When Plains peoples pursued Ute horse thieves driving herds west into the mountains, the Utes typically set fires to halt their pursuers (Howbert 1970:46-47). Their firing dead grass in the semi-arid Purgatoire River zone would have fostered grass growth and inhibited cacti and trees.

In the summer of 1832, apparently, the Bent brothers turned their wagons northward toward Fountain Creek after the Santa Fe Trail caravan reached New Mexico. North of Taos Pueblo, their train crossed the Sangre de Cristo mountains and Raton Pass into Purgatoire River headwaters (Lavender 1954:131). Opening a wagon road, the Bents followed the stream for a while but veered to strike the Arkansas River perhaps 70 miles downstream from Fountain Creek. Heading east to Missouri, the Bents encamped to rest their oxen in the lush oasis at the confluence of the Purgatoire and Arkansas Rivers. Cheyennes visited their camp (Lavender 1954:132). The traders realized that at least half a dozen tribes already ranged nearby: Arapahoes, Cheyennes, Utes, Apaches, Comanches and Kiowas (Lavender 1954:133). The Taos and Pecos Pueblo trade fairs and more recently the Spanish fair held at the Purgatoire-Arkansas River confluence attracted them.

The riverine oasis at the Purgatoire River mouth was Mexican territory. Consequently, the Bents chose a chalk bluff a dozen miles up the Arkansas as their trading post location (Lavender 1954:134-35). Ceran St. Vrain recruited possibly 150 Mexican laborers, who were paid largely in goods, at a theoretical \$10 monthly. They drove oxen to tread cheap wool into moistened clay, and packed the mix into molds. The resultant mud bricks dried in the sun until masons set them in place to create three foot thick walls 14 feet high and 137 feet long (Lavender 1954:136,138). Roofs of interior rooms were about 10 feet high. The massive structure was complete enough by the fall of 1833 to begin serving as an Indian trading post. The United States War Department did not license the Bent-St. Vrain enterprise until 18 December. While the post was under construction, the St. Louis price for beaver felt skidded from \$6 per pound to \$3.50 by October, 1833 (Lavender 1954:139), because Euroamericans switched

was wood to burn for warmth. The United States traders met the Spanish traders operating in the area. They failed to persuade the Kiowas to sell them horses even though Jacob Fowler estimated that there were 20,000 horses about the encampment (Mayhall 1962:58-59). The Spanish traders numbered 60, and sold the United States traders maize for \$10 per bushel, mules for \$30 apiece, and racing horses for \$100 each (Mayhall 1962:60-61). When United States traders first entered the Purgatoire River region, horses and mules had long been established as the most valuable commodities bought, sold and traded between members of different ethnic groups. The Spanish traders also exchanged agricultural commodities to Native American hunting and hide-processing specialists, just as Pecos and Taos Pueblos had, and the Mandans did to the north.

The Spanish traders on the Arkansas River frontier attracted Northern Plains tribesmen as well as the Southern Plains groups. Jacob Fowler reported that a party of Crows visited the Arkansas River, even though they fought with the Arapahoes there (Mayhall 1962:61).

By the time St. Vrain and the Bents established their trading post on the upper Arkansas across from the Purgatoire River canyons, Kiowas could exchange horses, mules and other commodities at trading posts on their northwestern and eastern frontiers. The United States Indian removal policy forced Creeks, Cherokees, Osages and other tribes into Indian Territory (modern Oklahoma). There they constituted a ready and large market for Indian traders (Mayhall 1962:71). A pioneer trading post was near modern Purcell, Oklahoma, at a spring on a creek near the Canadian River in Comanche territory. A later post in Kiowa country was three miles from modern Fort Sill (Mayhall 1962:74). At mid-decade, in 1835, Colonel Henry Dodge reported, although he met no Kiowas on his scouting expedition, that they numbered 1,800 to 2,000, ranging between the Arkansas and Platte Rivers near the Rocky Mountains (Mayhall 1962:75).

The lethal smallpox virus which swept through most Plains tribes in 1837, reportedly struck the Kiowas in 1839-40 (Mayhall 1962:77,150). The mortality that it caused may have persuaded the Kiowas and neighboring tribes that they had to work out amicable relations in order to survive Euroamerican pressures.

The Cheyennes and Arapahoes forced both Kiowas and Comanches southward as they themselves were forced south by the expanding Dakotas. Fighting between the Cheyenne-Arapaho allies and the Kiowa-Comanche allies became particularly bitter around 1826. William Bent recognized that his trading profits would rise if his post could attract more customers than the Cheyenne and Arapaho. The United States Dragoons that scout Col. Henry Dodge led in 1835, William Bent's influence as he sought intertribal peace and trade, and the smallpox mortality all played their roles in persuading chiefs of the warring tribes to change the military situation on the Southern Plains. No doubt the continued forced migration of eastern Native Americans into

from felt to silk hats and demand for beaver felt plummeted.

Horses, mules, and bison robes constituted the profitable mainstays of the Bent-St. Vrain trading post's commerce. Yet beaver pelts did make some contribution to profits. In 1839, for example, the partners sent 600 packs of bison robes and 10 packs of beaver pelts to Missouri. In 1840, they freighted 15,000 buffalo robes, and the next year 895 beaver skins (Weber 1971:212). The Utes, then, still sought bison on the upper Arkansas River watershed, as did Pawnees and Comanches (Abbott et al. 1982:38).

The Bent brothers and St. Vrain avoided using alcoholic beverages in their dealings with Native Americans, as much as possible. Their huge trading post on the north bank of the riverine international frontier, however, attracted Taos whisky vendors to the Mexican south bank (Lavender 1954:160). New Mexicans also carried flour, blankets, maize, beans, onions and peppers to the trading post and their own trading fairs (Abbott et al. 1982:39). The main trail from Taos to the trading post crossed the Purgatoire River, following it for a ways (Lavender 1954:163). This was a section of one route traders followed between Missouri and New Mexico. Euroamericans became major itinerant exploiters of this oasis's natural resources. Intergroup commerce fostered multigroup resource use, with eventual environmental impacts, particularly depauperation of trees and bushes (Garrard 1955:126-27; Hobbs 1874:60) leading to soil erosion.

All of the Plains tributaries of the Arkansas River are only intermittent streams, typically alkaline -- save only one. That one permanent flowing creek is the Purgatoire (Lavender 1954:134). Consequently, even Euroamericans gathered plants from its oasis environment. When the Bents wanted mint, for example, they reportedly sent riders miles up this stream on Mexican territory to pick wild stalks (Lavender 1954:160).

Within a few years of its founding, the Bent-St. Vrain trading enterprise employed about 100 non-Indian trappers, traveling in parties of 40 to 50 (Hobbs 1874:51). In 1839 one such group hunted and trapped along the Purgatoire River and Beaver Creek. During a four-month stay, this group took more than 500 beaver "and put up a great deal of bear bacon and bear's oil." Shawnee and Anglo-Americans who hunted meat to feed the trappers, killed elk, turkey, and bison besides grizzly bears (Hobbs 1974:52).

Occasionally, Euroamericans sought not luxury but survival rations in the Purgatoire River oasis. Smarting from a 1841 defeat of a Texas filibustering expedition, that republic, in 1842, commissioned one Charles A. Warfield a colonel. His commission empowered him to recruit men who would serve at their own expense and split their booty with Texas (Lavender 1954:217). Ten such filibusterers attempted to scout out northern New Mexico. Avoiding the Bent Fort-Las Vegas trail, they lost

themselves in the Purgatoire River canyons. Reduced to roasting cactus plants to survive, they recuperated for three or four weeks at lush meadows in the headwaters (Lavender 1954:219-20).

By the 1840s, the Comanches were centered upon the Canadian River in Texas. Frequent battles with the southward-moving Arapahoes and Cheyennes made Comanches somewhat reluctant to take horses and other commodities to Bent's trading post on the Arkansas River (Richardson 1933:179). Nevertheless, Comanches did visit the post after the 1840 intertribal peace agreement. In 1843, for example, thousands of them were reported to be near Bent's Fort (Richardson 1933:180).

If the Utes were to venture safely across the Plains to Bent's Fort, or into the Purgatoire River canyons to hunt deer, elk, antelope, or mountain sheep, or go farther east after bison, they had to be very alert. They reportedly posted sentinels at the edge of the High Plains as Anza did in 1779. The sentinels made windbreaks which also decreased their visibility. These were circular dry masonry stone walls four to five feet high, able to hold three or four men. Those overlooking the Fountain Creek Valley across the Arkansas River from the Purgatoire River zone were specifically identified as Ute (Howbert 1970:25-26). That comparable structures in the Purgatoire River canyons or overlooking mesas also are former Ute sentry-boxes is indicated in Ute oral history of military behavior there. The following quote was provided by Neil Cloud, a Ute cultural expert, while he was making an on site visit of one of these structures:

N.C. - That was what I was starting to tell you. That happened over in this area (Purgatoire River area) and the person that owned that doll was a warrior. He's the fellow that had that mesh shirt on. Those Ute warriors -- there must have been a couple of them that were watching the area from the high points where they made stone shelters. Nobody was allowed but the scouts out there. There used to be scouts out every day to peer at what's approaching. So they knew that there was a few horses -- horse riders -- approaching. See they (the Comanche travelers) were a coming from a flat country and a coming into a new territory that was full of thickets and so forth -- so they didn't pay too much attention. But the Utes being able to adapt to this kind of terrain, you know, they were using the Indian cover for their use, you know. That was another development we had over them -- that we could utilize the natural habitat (UWP field note: 7/31/83, Tape 15, Side 2; Time 054).

MEXICAN DEFENSIVE EXPANSION

A decade of New Mexican experience with the Bent-St. Vrain trading post on the Arkansas River frontier alerted provincial

Governor Manuel Armijo to the United States threat to the Purgatoire River oasis, the main road south to Las Vegas and the alternate to Taos, and the rest of the international border country. He set about encouraging a strategic defensive expansion of Mexican settlement on the frontier. He could, however, marshal but scant material resources to sustain colonization. Armijo resorted, therefore, to the profit motive, using his executive power to grant lands to colonizers.

Armijo granted young Narciso Beaubien and Steve Lee the Sangre de Cristo grant north of Taos along the Rio Grande into the San Luis Valley (Lavender 1954:228). The Governor also granted Ceran St. Vrain and Cornelio Vigil (uncle of Ignacia Bent) a huge tract immediately south of the Arkansas River. The Purgatoire River canyons lay within this tract, as did the Greenhorn, Huerfano, Apishapa and Chuchara valleys -- perhaps 4,000,000 acres. The act of possession purportedly took place on 2 January, 1844. In March, St. Vrain and Vigil conveyed a one-sixth interest to United States citizen Charles Bent (Lavender 1954:229) who was not entitled to a land grant according to Mexican law. Meanwhile, on 22 February 1844, Governor Armijo approved a huge grant just south of the St. Vrain-Vigil zone to Carlos Beaubien and Guadalupe Miranda (Lavender 1954:228,230).

Knowledge of the extensive New Mexican frontier land grants spread quickly to members of the Texas and United States commercial and political elites. The land grants created the perception that most of northern Mexico was granted to citizens. Consequently, when the Treaty of Guadalupe-Hidalgo was submitted to the United States Senate for approval a few years later, some senators objected to it. The eleventh article required the United States to curb Indian incursions into Mexico south of the new Rio Grande and Gila River frontiers, and provided that Mexicans injured by hostile raiders, should the United States fail to halt them, would be indemnified (Garber 1923:4,26). With the massive land grants in mind, Senator Sam Houston of Texas (1847:5) warned that enforcing Article XI would cost more than the value of all the vacant lands Mexico ceded. Houston assumed that the cession "will be covered by fraudulent grants" so the United States could acquire little saleable public domain. The Senate nonetheless approved the article by a vote of 47 to five.

Mexico briefly prohibited foreigners from importing merchandise into New Mexico. In 1844, the Santa Ana regime reopened the Santa Fe trade (Lavender 1954:230). It did not, however, allow foreigners to sell at retail in Santa Fe, so most United States merchants freighted their goods farther south in Mexico. The Bent-St. Vrain company sent eight wagon-loads of goods via the Taos-Purgatoire River wagon road to its fortified trading post on the Arkansas River (Lavender 1954:237). The Purgatoire River route toward Las Vegas served when William Bent took a party upstream to Box Elder Creek going to the Cimarron River to seek Cheyenne customers who were moving about to evade

Delaware warriors whose vengeance they feared (Lavender 1954:240).

Bent, St. Vrain and Company quickly sought to found farms and ranches within the Beaubien-Miranda land grant. The small oases along streams descending from northern New Mexico's mountains were obvious locations to settle. In the spring of 1845, Tom Boggs and John Hatcher planted maize on behalf of the trading company on Ponil Creek and built a hut there. The grizzly bear population was so large, however, that these colonists tired of lying out on a scaffold shooting them to protect cattle and crop (Lavender 1954:245; Garrard 1955:156). The grizzly bear population in the Purgatoire River canyons was probably not as dense as that encountered on Ponil Creek, because the animals likely avoided the travelers who often followed the wagon road between Las Vegas and Bent's trading post. Nonetheless, the bear hazard to expanding Euroamerican settlement implies that grizzlies had flourished in the area as sedentary human population diminished. On the other hand, the fact that grizzlies raided maize fields and hunted domestic livestock suggests that the wild game population in the Arkansas River headwaters was already significantly depleted by 1845 so that the giant grizzly bears were hungry. The predator population had for lack of human competition outgrown its wild game food supply. Removal of more than 500 beaver from the Purgatoire River and Beaver Creek in 1839 (Hobbs 1874:52) may have contributed indirectly to bear hunger. If the beaver were depleted in this oasis environment, their dams would have collapsed and their ponds drained or silted in. In either event, the fish habitat diminished and the grizzly bears may have depended significantly upon fish for food.

The grizzly bears may, in fact, have been hungry because their big game food supply had recently precipitously diminished through no fault of the predators. The bison herds reportedly abandoned the High Plains near the Rocky Mountains, and the latter, save for South Park and some valleys west of Pike's Peak, during the early 1840s (Howbert 1970:42). Later colonists who found many bison bones but no living animals within 100 miles of the mountains theorized that either an epizootic disease or extraordinary snowfall had killed the animals (Howbert 1970:43).

UNITED STATES TERRITORIAL EXPANSION

In 1845, the United States annexed the Republic of Texas. That action placed the nation on a collision course with Mexico. The Texas-Mexico boundary had been in dispute, and the United States claimed generally the lands Texas claimed. Consequently, a U.S. Army topographical engineer, Lieutenant J. W. Abert, was ordered to explore the Panhandle zone of modern Texas and Oklahoma, one of the areas of overlapping territorial claims. Lt. Abert's 33-man command used Bent's Fort as its jumping-off point in definite United States territory. Abert stayed at the

trading post at the same time as J. C. Fremont's ostensible exploring party bound for California, and Lt. Col. S. W. Kearny's 250-Dragoon army returning to Missouri from a long scout up the Platte River to the Rocky Mountains. Abert took the Purgatoire River road south to the Canadian and Washita Rivers (Lavender 1954:244-45).

In August of 1845, while posted at Bent's Fort, Lt. Abert ascended the Purgatoire River from its mouth. Abert neglected to mention the Indian trail he followed, perhaps because the trail was so obvious. He did, however, identify the Native American ethnic groups he encountered along the trail. At the edge of the broken country several miles up the Purgatoire River, at "a point of the tableland" from which the Rocky Mountains could be seen, Abert's explorers "met a party of Apache Indians." Apache women and children were riding mules or travois and were protected by men "on their prancing steeds" riding on the perimeter. Some dogs still served this group to pull travois (Galvin 1970:8).

A "few miles" up the Purgatoire River, Abert saw "the Cheyenne village, located in a beautiful valley shaded by ancient cottonwoods" (Galvin 1970:8). "They seemed well provided with horses, which were scattered around quietly feeding." Abert recorded this observation on August 17, 1845, so the Cheyennes clearly lived in the Purgatoire River oasis during the summer months in order to exploit its pasturage as well as during the winter months for shelter and firewood. Perhaps this is the old Indian village referred to fifteen years later (on July 14, 1860) by J. E. B. Stuart as he traveled the same Indian trail up the Purgatoire River.

Abundant dead and debarked cottonwood trees found along the Purgatoire River were noted and explained by Lt. Abert. He wrote, "We were astonished at seeing great numbers of fallen trees, but afterwards learned that the Indians are in the habit of foraging their horses in winter on the tender bark and young twigs of the cottonwood..." (Galvin 1970:8). The damaged cottonwood trees bore mute witness, in other words, to intensive Native American winter-time utilization of natural resources while living along the riverine oasis. During the cold winter months, the Cheyenne specifically divided into bands or family groups which sheltered themselves "in the cotton wood groves lining the streams" so the tribe was widely scattered (Powell 1969:III:482).

Speculation was rife that the United States and Mexico might soon war over the borderlands in dispute. Yet the Arkansas River was the legal international boundary north of the Purgatoire River system. So the entrepreneurs who dominated the multiethnic trade behaved within the existing legal situation. In the spring of 1846, St. Vrain and the Bents set about large-scale cattle ranching on the northern New Mexican land grants. George Bent and Ceran St. Vrain selected a ranch site on the Little Cimarron tributary of the Arkansas River. Vermejo and Ponil Creeks were additional oases colonized within the Beaubien Grant. Another

site on the St. Vrain-Vigil Grant lay just north of Raton Pass above upper Purgatoire Canyon (Lavender 1954:252). These development efforts were interrupted by international warfare and changing suzerainty. The United States declared war on Mexico on 13 May 1846 (Lavender 1954:253). Colonel Stephen W. Kearny returned to Bent's trading post with 1,700 troops, paralyzed its normal trading activity, requisitioned all of its stores, and stripped its repair shops (Lavender 1954:255,259).

As Kearny's Army of the West marched out of Bent's Fort on the wagon road to Las Vegas, several advance parties pulled ahead - Captain Philip St. George Cooke, Lt. De Courcey, traders Samuel Magoffin and Leitensdorfer, and William Bent leading a scouting party. On 4 August, Kearny sent William Bent ahead with Francis P. Blair, Jr., and five others, to reconnoitre the mountain passes. The summer temperature stood well over 100 degrees F., so all of the invaders welcomed the coolness of the upper Purgatoire River and Raton Pass (Lavender 1954:260).

On 5 August, 1846, Lt. William H. Emory reached the Purgatoire River crossing due north of Fisher's Peak about where the later north-south military road crossed the stream. Emory described what he called the "Purgatoire River" on his route map as here a "swift-running stream, a few yards in width, but no grass of any amount at the crossing." The frequent travel along the wagon road accounted for the scarcity of grass, and another vegetational pattern Emory noted. "The blighted trunks of large cotton-wood and locust trees were seen for many miles along its course, but the cause of decay was not apparent." Mules and other domestic animals found cottonwood bark palatable. When grass was scarce, teamsters encouraged their draft animals to eat cottonwood bark, especially during the winter in a semi-desert environment affording little or no grass and not much browse. Major Emory penned a list of plants growing at or near the Purgatoire River crossing:

The growth of the bottom, which is very narrow, was black locust, the everlasting cottonwood, willow, wild currants, hops, plum and grape, artemisia, clematis Virginiana, salix, in many varieties; and a species of angelica, but no fruit was on the bushes (Emory 1848:17).

The wagon road ascended from the Purgatoire River crossing to Raton Pass via a tributary of the stream. Only a few stunted cedar trees dotted the generally barren slopes. Major Emory noted that "the valley is said to be, occasionally, the resort of grizzly bear, turkeys, deer, antelope, &c."

Similar and additional observations of the Purgatory River oasis were made by Lt. Abert a few weeks after Emory's visit to the crossing on the upper Purgatoire River. Abert camped at the crossing and found "any quantity of water and plenty of wood" (Galvin 1966:27). Lt. Abert's party laid over a day and feasted on venison. "There were five deer killed during the day... The

whole river bottom is filled with deer, but the brush is so dense that it is difficult to see them" On 14 September, frost had already killed the grapes and plums (Galvin 1966:27). Like Emory, Abert referred to the stream as the "Purgatory," and he identified the riparian vegetation as including:

great quantities of the willow, some tall box elder, and dense thickets composed of the locust and plum, both interwoven with grapevines. Here the innumerable deer find shelter.

Abert recorded another environmental factor related to the abundance of deer living in this riverine oasis. The nearby Plains offered extensive surface deposits of mineral salts, "and the ground is quite bare in many spots where the animals have licked it" (Galvin 1966:28).

On 8 August, the Army of the West encamped on the Canadian River to rest and allow its artillery to close up (Emory 1848:20). On 14 August, the army occupied Las Vegas (Emory 1848:26), and on the 17th, passed through Pecos Pueblo (Emory 1848:29). On the 18th, the army occupied the provincial capital of Santa Fe without opposition (Emory 1848:32), thus de facto annexing the province to the United States. This jurisdictional change, and activities related to it, drastically altered the multiethnic trading pattern in the area in which the Purgatoire River oasis was central.

Civilian teamsters contracted to haul supplies for the troops occupying New Mexico offloaded cargo at Bent's Fort. So army teamsters had to reload and freight from the trading post to Santa Fe via the Purgatoire River wagon road (Lavender 1954:268). Traffic was frequent: 30 wagons weekly during October. United States teamsters appropriated the Ponil, Little Cimarron and Vermejo Creek ranches and farms on or near the wagon road in the Canadian River headwaters. William Bent undertook, nonetheless, further development on the upper Purgatoire River. He ordered John Hatcher to recruit laborers at Taos to excavate a two-mile-long irrigation canal at a meadow where willows, cottonwoods, locust trees and grapevines lined the creek. Before the crew completed the canal, George Bent took Hatcher off on a mule-trading jaunt among the Apaches and Utes, perhaps all the way to California. William Bent sent company livestock to winter on good grass nearby, but then government teamsters moved into this oasis, too (Lavender 1954:267; Garrard 1955:153-54).

George Bent's decision to go on a mule-trading expedition toward the end of the period during which the Bent-St. Vrain trading company dominated commercial activity in the region illustrates very well one significant characteristic of the profitable trading activity between 1821 and 1848. Livestock -- horses, but especially mules -- constituted the most valuable single commodity in which traders dealt. Much has been written about the fur trappers and commerce in peltries on the Plains and in the Rocky Mountains. Yet, as the 1847 mule trading expedition

indicated, mules constituted the single most valuable and profitable commodity in which the Bent-St. Vrain Company and other Euroamerican traders, New Mexicans, and Native Americans, dealt. The demand for good mules in the United States stimulated New Mexican-United States trader penetration through the Rocky Mountains to California in 1829. Mules and horses were the most valuable commodity taken from California to New Mexico over the "Old Spanish Trail" which opened that year (Stoffle and Dobyns 1983:93). As early as the summer of 1834, only a year after Bent's trading post opened, Old Bill Williams drove horses all the way from California to Bent's Fort (Lavender 1954:153-54) for export across the Plains to the Missouri market. On occasion, the Bent family's peripatetic trader agents visiting the trapper/trader rendezvous acquired horses and mules which the great Ute raiding band chief Walkara brought from California (Lamar 1977:23; Bailey 1954). Walkara in effect expanded the post-horse "Plains" illicit horse trade all of the way from the trading post frontier near the Purgatoire River to the Pacific Coast.

Horses and mules had the commercially admirable quality of transporting themselves to market. They were also in constant demand in the horse-powered society of both Mexico and the United States, as well as in Native American groups. "The horse was both a form of capital and a medium of exchange for the Comanche" because Nineteenth Century Comanches "could find a market for horses of good quality" (Richardson 1933:27). All too often, anthropological theorists, even those trying to analyze the cultural dynamics of Plains Indian personality, have identified "acquiring honor and stealing horses" as principal goals of Plains peoples (Gladwin 1957:112) without taking into account that horse theft was not an end in and of itself. The ultimate motivating force behind inter-tribal horse theft was United States demand, constantly personified to the Plains peoples by the traders to whom they exchanged horses, mules, and animal products for firearms, munitions, and other manufactured products.

The large-scale mule and horse trade nowhere left any physical traces, save hoof-cut trails which eroded when it rained or the wind blew dust away. This reality poses a problem of accurate archaeological interpretation of temporary camps in the Purgatoire River system. On the other hand, the fact that the Purgatoire River provided the only permanently flowing water in a large area south of the Arkansas River mainstream meant that Indians driving mules and horses to Bent's Fort from the south inevitably made heavy use of the Purgatoire River oasis. Livestock had to drink in order to arrive at market in good condition, so Indians preparing to sell mules and horses at the trading post undoubtedly often encamped along the Purgatoire River to enable animals to graze, browse, and drink their fill so that they would arrive at the trading post in the best possible condition. As long as travelers depended upon surface water, they preferred following stream courses or riding their mounts from one oasis to another. Thus, numerous tipi rings, and brush

shelter remains in the river system probably survive on the ground surface from the 1833-1848 period of intensive commercial activity in mules and horses, as well as bison robes and other big game products. The domestic animals moving from production area to market left no physical traces, but their transitory owners did leave a few.

A Muoache Ute delegation treated with Brigadier General S. W. Kearny while he was in Santa Fe in 1846 (news of his promotion reached Kearny on the trail between Fort Leavenworth and Santa Fe). Three weeks later, another Ute delegation treated with Colonel Alexander Doniphan. Both groups agreed to remain at peace with United States citizens. Numbering approximately 1,000, the Muoache Utes claimed the San Luis Valley and the mountains east of it where they spent the summer, as well as the Plains of southeastern Colorado and northeastern New Mexico (Lecompte 1978:238). To the extent that the Muoache Utes actually occupied the Purgatoire River oases, they returned the area to the Circum-Pueblo culture area, if their Chief Le Chat was truthful about their growing maize in 1822. Given the multiplicity of powerful Southern Plains tribes trading at Bent's Fort, however, it appears rather doubtful that the Muoache Utes actually controlled the Purgatoire River oasis. It appears more likely that they ranged there and fought other tribes there and nearby when hunting bison or traveling to the Bent-St. Vrain trading post to trade.

Events outside the immediate Purgatoire River oasis profoundly influenced activities within the system. After he occupied New Mexico, S. W. Kearny on 22 September, 1846, appointed Charles Bent civil governor of the conquered province (Lavender 1954:264). Occupation troops, largely Missouri Volunteers, aggravated the Hispanic population, and Native Americans on all sides interpreted United States-Mexico warfare as an opportunity for profitable economic raiding (Lavender 1954:273). In mid-January, 1847, Governor Charles Bent rode from Santa Fe to Taos to relax with his family. Taos Indians met his party outside the town demanding that some of their friends, then under arrest, be released from jail. Bent told them that the government would handle the cases according to law (Lavender 1954:280).

Mexicans and Taos Indians joined forces during the night of 18 January. Just before dawn, the dissidents attacked the jail, killing Sheriff Steve Lee, and then Prefect Cornelio Vigil. The mob looted stores of the intrusive Euroamericans, hunted out Circuit Attorney James Leal and filled him with arrows, roused Narciso Beaubien and Pablo Jaramillo from a barn and killed them (Lavender 1954:281). The rebels attacked Charles Bent's home after 7 a.m., breaking through door and roof, shooting him with arrows and bullets (Lavender 1954:282). The Bent family and faction casualties were a nearly crippling blow to the enterprise which had dominated the international frontier trade for a generation.

The New Mexican rebels also took direct action against Bent-St. Vrain Company interests in the frontier ranches. Late on 24 January, rebels attacked the company's Ponil and Vermejo ranches. They caught soldiers, teamsters, and the company's Mexican herders unprepared, driving off 400 or more company horses and mules and 200 of the 1,000 government cattle. The frightened troops and herders retreated to the Purgatoire Ranch. Frank De Lisle was encamped there with company wagons and livestock (Lavender 1954:285; Garrard 1955:151). De Lisle started to harness teams to wagons to flee to the trading post, but an officer commanding another government unit threw his wagons into a square on a hilltop, and drew up breastworks. He organized the soldiers into a defensive force, and ordered herders to scatter government livestock in other meadows (Lavender 1954:286; Garrard 1955:136).

The commander of the single United States army company garrisoned at Bent's Fort refused to risk his troops in the field. Company free traders, and employees with families in Taos, started south on the Purgatoire River route with only five horses (Lavender 1954:288; Garrard 1955:123). At the Purgatoire River Ranch they mounted on company animals and rode south via Raton Pass (Lavender 1954:289; Garrard 1955:137,139). They were too few to affect the outcome of the rebellion.

Colonel Sterling Price, commanding at Santa Fe, asked Ceran St. Vrain to recruit volunteers, and marched north with 353 men. At Santa Cruz he routed some 1,500 Mexicans and Taos Indians. The defeated rebels made another stand at El Embudo, but the reinforced United States force attacked on both flanks and center, routing the minimally organized rebels. The Mexicans disbanded, but the Taos Pueblo natives retreated into their fortified town. Price assaulted with minimally effective howitzers and sappers, inflicting heavy casualties. St. Vrain's mounted volunteers killed many Indians who tried to flee to the mountains (Lavender 1954:290-92). Having lost over 150 men, and with more wounded, the Taos chiefs sent out white flags and crosses, begging for mercy. The revolt ended, except for courts-martial for its leaders (Lavender 1954:293; Garrard 1955:143,157). United States annexation was not to be again disputed by Hispanic Americans, although hostile Indian tribes continued raiding New Mexican settlements. The Purgatoire River zone was definitively within the United States.

In spite of the dramatic losses to the Bent extended kindred, William continued economic development efforts on the frontier land grant. John Hatcher returned north from the settlements, instructed to move 100 head of company cattle from the Vermejo Ranch to the Purgatoire River Ranch. There William Bent himself worked with three other men to complete the four foot wide irrigation canal and diversion dam. Turning creek water into the canal, the crew erected cottonwood log cabins and barns. It also used newly arrived iron plows to till 60 acres planted to maize (Lavender 1954:297, Garrard 1955:232) in a mile long, level bottom where willows, plum trees, grapes, hops,

currants, cottonwood and locust trees grew along the curving stream banks (Garrard 1955:242).

Native Americans exploiting Purgatoire River resources had long since conceded Euroamericans transit along the Bent's Fort-Las Vegas wagon road. It only crossed the permanent stream, after all, and ascended one tributary to Raton Pass. The Bent Ranch at the mouth of Purgatoire River was another matter. Irrigation farming and large-scale ranching there threatened Native American utilization of the oasis near the mouth and upstream as well. Consequently, Utes who ranged southeast to the upper Canadian River (Garrard 1955:156) utilized force during the unsettled war period to evict company personnel. They stole the horses and mules at the ranch, and ordered John Hatcher to leave. When he stayed, they killed all but three of the cattle on the meadow and repeated their message that the oasis belonged to them. Hatcher cut a wagon in half, and harnessed the single yoke of oxen left to it (Lavender 1954:302; Lecompte 1978:199, Garrard 1955:243). Numerous company cattle continued running wild near the abandoned ranch (Lavender 1954:305). Occasional wagon trains traveling between Bent's Fort and Missouri encamped at the oasis (Garrard 1955:249).

By this time, the Jicarilla Apaches depended upon raiding and trading to survive. They raided from the San Luis Valley to the Taos area. On 12 June 1848, for example, they attacked a Lucien Maxwell packtrain in the Raton Mountains (Tiller 1983:33). They traded at Las Vegas (Tiller 1983:34), but sought government rations (Tiller 1983:37). They were more than willing to settle down to farming a riverine oasis reservation, but the government failed to reserve lands for them for almost 40 years until 11 February 1887 (Tiller 1983:96).

During the summer of 1849, thousands of emigrants went by Bent's Fort to Pueblo, Colorado, at the confluence of Fountain Creek with the Arkansas River main fork, then took several routes around the Rocky Mountains to California (Lavender 1954:313). With them they carried cholera, transmitting it to the Cheyennes. Within a few weeks, half of the Southern Cheyennes perished, including the mother of William Bent's wife, Yellow Woman.

The mortality seems to have been a final psychological blow to William Bent, following closely on the dissolution of Bent, St. Vrain Company (Lavender 1954:312). On 21 August 1849, William Bent ordered company personnel to strip the adobe trading post of everything of value. They loaded 20 wagons, each drawn by six yoke of oxen. The caravan encamped five miles down the Arkansas River. William Bent returned to the post and rolled powder kegs into its main rooms. He fired the wooden roofs, the debris, and rode off before the gunpowder exploded (Lavender 1954:315-17). William Bent continued downstream to the Big Timbers where several Indian tribes had for many years wintered. There his staff built three log cabins forming a U with a picket stockade across the opening. There he continued trading with Southern Plains Indians (Lavender 1954:317).

By 1849, other traders had captured a significant portion of the tribal livestock trade the Bents once more or less monopolized. David K., John F., and Thomas S. Torrey, brothers, operated trading posts at Presidio, Texas, on the Brazos and upper Red Rivers (Harris 1960:35,37). A Forty-Niner party saw Comanches returning from a raid into Mexico driving about 500 horses and mules to the Torreys' Brazos River trading post to sell to the firm in which ex-Senator Sam Houston owned shares (Lamar 1977:13). The large number of animals Comanches obtained in one raid and sold to Anglo-American trading post operators illustrates how primary was the economic role of horses and mules in the post-1825 trading post culture area in which Comanches, Kiowas, and Apaches lived. The large number of animals also indicates why tribesmen driving livestock to Bent's trading post in previous years necessarily watered them along the Purgatoire River northbound. Smaller creeks or springs could not supply sufficient water for the large herds (see previous discussion).

TRADING POST ERA,

THE USA PHASE 1850 - 1870

In 1850, Native American dependency on Euroamerican goods increased when Agent Thomas Fitzpatrick distributed at the new post and on the Platte River presents destined to lead toward a pan-Plains negotiation of peace with the United States. William Bent and Kit Carson profited by driving mules and horses north to the Platte River route to California to sell to emigrants. Bent employees continued this profitable horse and mule trade after 1850 (Lavender 1954:318-19). The multi-tribal negotiation Fitzpatrick envisioned occurred at Fort Laramie in 1851. The United States recognized Arapaho and Cheyenne territory as the land east of the Rockies between the Platte and Arkansas Rivers (Lavender 1954:322). The United States also agreed to pay annuities to tribesmen precisely when their big game resource base was diminishing below a subsistence level.

In 1853, William Bent set ten men to quarrying stone to build a new fortified trading post at the Big Timbers. Once built, it became the distribution point for annuities the United States paid Indian tribes economically tied to that post (Lavender 1954:324-25). By that time, according to the experienced Fitzpatrick, the bison herds had been so disrupted that the Plains tribes went without big game food for half the year. They were already gathering around the licensed trading posts, seeking remuneration as messengers, herders, interpreters, and women engaging in prostitution. Annuities became vital to native survival (Lavender 1954:326), augmented with outright welfare assistance from traders.

Relations between Euroamericans in New Mexico and its Native American neighbors continued hostile. Late in 1854, the New Mexico Volunteers operating under St. Vrain and Carson in the San

Luis Valley chased some southeastern Utes east toward the Purgatoire River system (Lavender 1954:330). On Christmas day, they or other Utes killed all the Euroamericans inhabiting a trading hamlet at the mouth of Fountain Creek (Howbert 1970:67-68). These Utes may have crossed the Arkansas into the Purgatoire River canyons, likely going up that stream to the Rockies. In the summer of 1857, Bent rented his new post to the government to store annuity goods for distribution. Colonel E. V. Sumner confiscated them, throwing powder, lead and gunflints into the river. William Bent encamped at the mouth of Purgatoire River on the St. Vrain-Vigil Grant (Lavender 1954:333).

The following year, 1858, Euroamericans followed an earlier Cherokee gold discovery on Cherry Creek, and a rush to Colorado occurred. Citizens invaded lands the United States had in 1851 guaranteed by solemn treaty to the Arapaho and Cheyenne (Lavender 1954:334-36).

There can be no doubt that Native Americans often traveled through the Pinon Canyon Maneuver Area along the Purgatoire River. Bent's new fort only provided one more reason for such travel. The physical evidence of such travel was clear to the great cavalry officer, J. E. B. Stuart (1959:234) on July 14, 1860. Having ascended the Arkansas River from Bent's Fort, and forded the main stream, Stuart "struck well beaten Indian trail up right bank of Purgatoire river." Stuart followed that trail eight miles before he camped. On July 15, he continued five and a half miles up stream to a "good ford," crossed and rode a mile and a half to a dry creek where he left the stream bank. Another 14 miles took Stuart to old Cheyenne and Arapaho winter and/or summer camps (Stuart 1959:235). Perhaps he observed the same Indian camps as did Abert in 1845?

Despite epidemic disease mortality and battle casualties, 3,000 Arapaho, Apache and Cheyenne collected at Bent's Fort in July, 1860, to collect their annuities from the United States. Once again the army considered purchasing Bent's Fort, and in September William Bent temporarily leased the stone trading post to the government (Lavender 1954:345). He returned upstream to the resource-rich oasis at the confluence of the Purgatoire with the Arkansas River. He enlarged the existing stockade, setting 15-foot high log pickets tied together near their tops with square-hewn beams fastened by wooden pins. Inside were living quarters, store rooms, a blacksmith shop and stables (Lavender 1954:346). This transfer of the Bent trading post to the mouth of Purgatoire River meant, of course, that Indians traveling to and from the post heavily utilized the natural resources along the entire main valley of the stream, as well as the Arkansas River Valley east and west. The Euroamerican presence was strengthened during the 1860-1861 winter when 350 soldiers built Fort Wise of stones laid in mud mortar (Hollister 1949:37).

The primary axis of Native American trade shifted away from the Purgatoire and Arkansas Rivers, however, as Euroamericans migrated into Colorado Territory. Merchants followed on the

heels of miners. Their stores could not individually match, perhaps, the range of goods William Bent offered in his trading post. Yet, the assortment of increasingly diversified retail stores in the rapidly growing towns offered a much greater selection of goods of all kinds than Bent's or any other trading post had ever been able to stock. Consequently, materialistic Native Americans, long since integrated, if imperfectly, into the world market, behaved logically. They sought additional knowledge of the marketplace, and as they acquired it, acted upon it. They flocked to the new settlements.

Beginning in mid-May of 1860, "great numbers" of Arapahoes, Cheyennes, Kiowas, Comanches, Apaches and even Dakotas gathered at Denver. "We understand it is their design to establish their villages, leave their women, children and old men, and unite in a grand foray upon the Utes" (Rocky Mountain News, 30 May 1860). The conflict mindset of the reporter almost surely overlooked the mundane commercial activity of the multitribal encampment located very near where intertribal trading fairs had been held since at least the early years of the century.

Native American exploration of rapidly growing Euroamerican settlements involved an element of ethnic and personal pride -- boasting and showmanship. When the Arapahoes came to the 1860 Denver intertribal meeting, their advance guard consisted of members of a war party which had just returned from raiding Utes. Their plunder included "four scalps and forty or fifty ponies." As soon as the Arapahoes encamped, they "commenced a scalp dance with all its musical and other accompaniments, which continued through the night."

More peoples joined the encampment and then the Arapahoes indulged in showmanship which was not aboriginal, "a grand triumphal entry into the city, with music, banners, and hundred (sic) of gaily caparisoned horses and their riders."

During the day the scalp dance was performed several times in the principal streets, in the presence of hundreds of curious spectators.

Never have we seen a more striking contrast between savage and civilized life (Rocky Mountain News, 23 May 1860).

The Arapaho cross-cultural exhibitionism to non-Arapahoes of a once sacred ethnic victory ceremony performed to transfer the supernatural powers of slain enemies to the slayers indexed a very fundamental change in tribal life and basic beliefs. The Arapahoes were abandoning traditional subsistence activities in areas such as the Purgatoire River canyons. They were seeking (or forced to seek) more and more Euroamerican style foods, clothing, condiments, and contact. Their performance of the scalp dance in public suggests that these cultural changes had proceeded to a great extent by 1860. It is difficult to

determine the economic condition of the Arapahoes at this time. Some Plains groups had already been reduced to beggary. "Many along the Platte River route to Denver are without any visible means of support, are half naked, and more than half starved" begging food from travelers (Hafen and Hafen 1961:161).

The Purgatoire River oasis became the theater of conflict between diverse ethnic groups employing different subsistence technologies but all relied on horses and mules for transportation. All of the competing groups were, therefore, vulnerable to stock theft. Late in January of 1861, an Arapaho band drove off a considerable number of head of stock belonging to Euroamerican colonists along Purgatoire River. The raiders seem to have attacked the settlers only to divert them while the livestock was stolen. The citizens sent a messenger to Fort Wise and troops sallied forth to seek the stock thieves. The soldiers overtook them near Raton Pass, and an engagement resulted. The Arapahoes lost a dozen men; the troops only one man. The raiders fled, abandoning their lodges, which the victors burned (Rocky Mountain News 13 Feb. 1861:4). The camp probably was but one of many burned during historic times within the Purgatoire River drainage. The earthen walls of old Bent's Fort endured, however, and mail contractors began using one portion as a station (Hollister 1949:29).

THE WAR OF THE REBELLION

The War of the Rebellion began accelerating Euroamerican travel through the Purgatoire River area. The conflict also occasioned the recruitment of large volunteer military forces which moved through southeastern Colorado and northern New Mexico, making the area unsafe for Native Americans. Although William Bent's youngest brother resigned his navy commission and one of his sons enlisted in the Confederate States of America army, William Bent turned to hauling army freight from Missouri to New Mexico (Lavender 1954:347). Moreover, when a CSA agent urged the Southern Plains tribes to fight the Union, William advised them to stay out of the sectional conflict between Euroamericans. His Arkansas-Purgatoire River trading post was the commercial magnet for Arapaho and Cheyenne as well as other tribes. Thus Bent and his post strongly influenced the outcome of the abortive Texas invasion of New Mexico (Lavender 1954:348).

Volunteer troops mobilized in Colorado Territory provided the manpower to turn back a Confederate States of America army after it had captured Albuquerque and Santa Fe, New Mexico. A regiment of volunteers was recruited in 1861 soon after the war began. Some units garrisoned Fort Wise at the Purgatoire-Arkansas River confluence; others remained nearer the mountains.

At the beginning of 1862, Union officials in Denver learned that the Confederates had invaded the Rio Grande Valley. Not until 10 February did a dilatory Department of Kansas commander at Fort Leavenworth order the Territorial governor to send the

volunteers south to reinforce the retreating Union army in New Mexico.

Lieutenant-Colonel Samuel F. Tappan rode out of Fort Wise on 3 March. The other units had departed on 22 February (Whitford 1971:75). Tappan's contingent reached old Bent's Fort on 4 March (Hollister 1949:46), and the other units reached Pueblo at the Fountain Creek-Arkansas River confluence. They learned that Union forces had been defeated at Valverde, New Mexico, and lost their artillery to the Confederates. The Colorado Volunteers discarded their extra clothing and gear and struck southward across country to Gray's Ranch on the Purgatoire River near modern Trinidad. This was a 75-mile movement for Tappan's command. Gray's Ranch was one of the way stations located every 40 miles along the military road from Denver to Fort Union, New Mexico (Conner 1970: 86-87,148,167). Leaving Gray's Ranch on the military road, the Colorado Volunteers climbed over Raton Pass into New Mexico (Whitford 1971:77).

Tappan's troops may have followed the Purgatoire for a way approaching Gray's Ranch, but several inches of snow covered the ground and they covered 40 miles the last day out, so would have left but little trace of their passage. The 7 March ranch encampment of several hundred soldiers could, on the other hand, have left traces such as lost coins, tools, broken kettles, etc., around the station.

The Colorado Volunteers met the advancing Confederate army at Glorieta Pass between Pecos and Santa Fe. The two armies fought to a virtual standoff. Major J. M. Chivington's cavalry circled through mountainous terrain and destroyed the virtually undefended Confederate supply train. That was the crucial action which left the Southerners without ammunition to continue fighting. They retreated back to Texas.

Enough Southerners had colonized Colorado to make Union officials uncertain about holding the Territory for the Union. The Southern minority did briefly attempt to organize a military unit within the Territory (Conner 1970:87) and a small guerrilla band far ahead of the invasion army seized the mail train on the Fort Garland road in August of 1862 (Conner 1970:145n). Most Southerners simply slipped away and set out for Texas or some other Confederate State. Union officials attempted to intercept such escapes via New Mexico by patrolling the Purgatoire River canyon (Conner 1970:148,166-67). The patrols may have left physical evidence of their activities.

The recruitment of volunteer military units, particularly those composed of new immigrants in Colorado, drastically reduced the policy influence of William Bent, Christopher Carson, and the handful of experienced pioneers who best understood Plains Indian culture and motivations. The result was personal and tribal tragedy on a grand scale.

Colorado's territorial governor issued a proclamation that

friendly Kiowa and Comanche should collect at Fort Larned and Southern Cheyennes and Arapahoes at Fort Lyon (former Fort Wise) on the Arkansas River (Lavender 1954:352-53). When Kiowas approached Fort Larned, however, a guard confronted Chief Satanta, who fired an arrow into his arm (Lavender 1954:355). A contemporary Denver newspaper account blamed Chief Satanta for starting the fracas. It claimed that the post commandant had "long disgraced his shoulder straps" by daily issuing the Indians rations.

It was the daily practice of the Indians to assemble in front of the headquarters to sing, dance and beat their drums. They numbered from one to six hundred usually, and when the discord became unbearable, they were fed and sent away.

On Sunday, 17 July 1864, the Indians appeared as usual to dance. Letters to the Denver newspaper claimed that "in the midst of the hubbub, a chief named Satank fired upon a sentinel, wounded him in the arm with an arrow." A mounted Mexican reportedly also fired on the sentinel, who shot the rider off his mount.

This seems to have been the signal for a general onslaught. The plains were instantaneously alive with savages. The women and children disappeared as if by magic, and the red devils began collecting together the stock and hurrying it away. (Rocky Mountain News 1 August 1864).

Historical judgment infers that the guard confronted Satanta (Satank above). After this initial incident, nervous soldiers fired on Arapaho Chief Left Hand. Convinced that government representatives lied, the tribes went to war (Lavender 1954:355). The Kiowas went to Bent's Purgatoire River post on 7 August, but William bluffed them. Still some Indians sought accommodation. Chief Left Hand went to join Cheyennes on Sand Creek perhaps 40 miles north of Fort Lyon on the recently designated reservation. The village contained about 500 women and 200 men. The commander unpopular with the aggressive Euroamericans had been arrested, and replaced by a captain in the First Colorado Volunteers (Rocky Mountain News, 1 August 1864:2). That officer notified Col. J. M. Chivington of the Colorado Volunteers where the Indians were living. With 750 cavalymen, Chivington rode over the snow-covered ground to attack at first light. William Bent's half-Cheyenne son George, wounded by the attackers, estimated that 163 Indians died, including 110 women and children (Lavender 1954:356-59) however, much higher numbers of dead were reported by other sources (Dunn 1886:345). Chivington let his troops take Indian body parts for trophies (Dunn 1886:345) which were later placed on public display in Denver. The Plains tribes retaliated, especially along the Platte River travel route (Lavender 1954:361).

By that time, there was little Indian trade at the Bent post at the Purgatoire River mouth oasis. William Bent hired out

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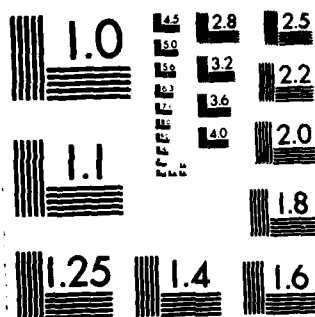
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

wagons to freight government supplies to Santa Fe and Fort Union (Lavender 1954:364). As United States troops and state volunteers forced Plains Indians onto reduced post-war reservations, Native American utilization of the Purgatoire River oasis diminished. Consequently, Euroamericans began colonizing there. The Bent extended family and in-laws expanded the settlement at the trading post. Another mile-long irrigation canal watered fields above the stockade. Tom Boggs and William's half Cheyenne son Robert dug that ditch. Colonists began purchasing plots, forming a town first called Boggsville, later Las Animas (Lavender 1954:365). In 1866, the Territorial Legislature created Las Animas County (Frech 1973:6) which encompassed the Purgatoire River system. Native American accommodationist leaders effectively diminished tribal raiding. When Utes struck nearby Huerfano Creek colonists in 1866, Chief Ouray sent runners to halt them. Later, he forced them to go to Fort Garland (Howbert 1970:68). The Purgatoire area was free from Ute hostilities.

It was not free from internal intergroup tensions among colonists. On Christmas day, 1867, an Anglo-American shot a Hispanic American and was arrested by Las Animas County Sheriff Gutierrez. Anglo-Americans tried to free the accused killer on New Year's Day, 1868, but scores of Hispanic Americans backed up the sheriff. Federal troops arrived on 5 January to keep order, and remained until spring (Abbott et al. 1982:46). United States army garrisons had tasks other than fighting Native American underemployed hide hunters.

Even Kit Carson finally left federal service in 1867, buying from Ceran St. Vrain property near William Bent's ranch and also up the Purgatoire River (Lavender 1954:365). Carson died on 23 May 1868. William Bent died on 19 May 1869 (Lavender 1954:366). It would be tempting to state that their deaths marked the end of an era -- the period during which Indian trading posts acted as magnets drawing Plains tribes to acquire Euroamerican manufactured commodities -- the period during which Plains Indians fully developed the tailored skin clothing, their skills as mounted warriors, the nearly constant fighting over overlapping territory supporting a steadily diminishing big game resource base, which formed the dominant stereotype of the typical post-horse Plains Indians. Actually, the era terminated during the War of the Rebellion, when federal army officers inexperienced in frontier Indian relations and territorial volunteer officers lusting for political office, provoked unnecessary and avoidable intergroup hostilities and then employed vastly superior manpower and military force in genocidal campaigns. Concerned with their personal problems, Anglo-American colonists were typically "boosters" incapable of perceiving Native Americans except in ethnocentric terms (Abbott et al. 1982:76).

Mexico's War of Independence opened New Mexico to commercial activity by United States citizens, ushering in the trading post era. The War with Mexico was an historical turning point,

resulting in United States annexation of New Mexico south of the Arkansas River. Migration of United States citizens to New Mexico and Colorado thereafter steadily changed the demographic situation of lands around the Purgatoire River system. Then the War of the Rebellion brought bitter intergroup hostilities and genocidal anti-Indian campaigns. These made the Purgatoire River canyons uninhabitable by Native Americans. They were driven onto smaller and smaller reserved areas as the leaders of the victorious Union governed in the firm conviction that they were fulfilling the Manifest Destiny of the United States to colonize the land vacated by Native Americans steadily declining in population. After 1865, the Purgatoire River oasis became one of the frontiers of Euroamerican agricultural settlement -- one of the local examples of the kind that frontier historian Frederick Jackson Turner would, toward the end of the century, visualize for his contemporaries as the key to national greatness. The fact that the Purgatoire River oasis had witnessed a prolonged parade of peoples ever since the Sixteenth Century attests how woefully inadequate was Turner's narrow formulation of the "frontier" as a "line" of farm settlement for accurately understanding the broad sweep of historical change in the Southwest.

This is not to say that interethnic conflict ended immediately after the War of the Rebellion. It did not. Not until 1876 did the Cheyenne and Dakota allies wipe out most of the United States Seventh Cavalry at the Battle of the Little Big Horn. Not for several more years would the United States be able finally to impose its Pax Americana on the Northern Plains. On the Southern Plains, conflict dragged on as tribesmen sought to avoid what was essentially internment on reservations which closely resembled unofficial prisoner-of-war camps.

In 1865, some Tabeguache Utes scheduled to receive annuity goods at a salt work chose instead "to join the Grand River and Uintah bands in receiving their presents at Empire City rather than give up their war expedition against the Arapahoes" (Evans 1865:182).

In 1868, several Southern Plains tribes mounted an offensive that motivated numerous farm laborers to abandon irrigated farms along Arkansas River northern tributaries during the harvest season. Farmers themselves at least temporarily abandoned their farms, leaving crops standing in the fields to rot while they moved their families to the safety of towns. During September, citizens reported seeing a body of 2,000 warriors near old Bent's Fort.

At the mouth of Las Animas, near Fort Lyon, in Pueblo county, two citizens were killed on election day. One of them was clerk of the election, and on his way to open the polls.

"Las Animas" is the short Spanish form of the earlier historic name for the Purgatoire. The Native American group responsible

for these attacks appears to have been the Kiowa tribe led by Chief Satanta (Rocky Mountain News, 21 September 1868:3)

The fall of 1868 did not produce bloodshed everywhere that Native Americans traveled. By that time, a considerable urban settlement of Euroamericans had grown up at the old wagon road crossing of the Purgatoire River near the Rockies. It was called Trinidad, and was the county seat of Las Animas county. That fall, Trinidad and Las Animas county witnessed their last Indian raid, which was almost bloodless. Five or six lodges of Utes who had been hunting bison on the Plains farther east were encamped at the edge of the town near the stream. Perceiving the approach of some 50 Comanches pursuing them, the Utes plunged into the river and hid in the willows, except for one boy.

The Comanches administered the coup de grace to this youth and departed. The boy's father was absent when the Comanches attacked. He told settlers that his son had killed a Comanche while the latter was scalping him. The Utes had brought the boy to Trinidad in bad physical shape. Not only had he been scalped, but also severely wounded. A local doctor amputated one of his arms, and pronounced him as "in a fair way to recover" despite his injuries. The Comanches pursued to revenge the death of the warrior whom the boy had slain (Trinidad Daily News, 29 January 1881:1). The new settlement attracted the traveling Utes, who may have indeed supposed that the Comanches would not dare to attack them on the outskirts of the town. Otherwise, the incident probably is representative of many earlier Ute hunting expeditions back and forth along the Purgatoire River.

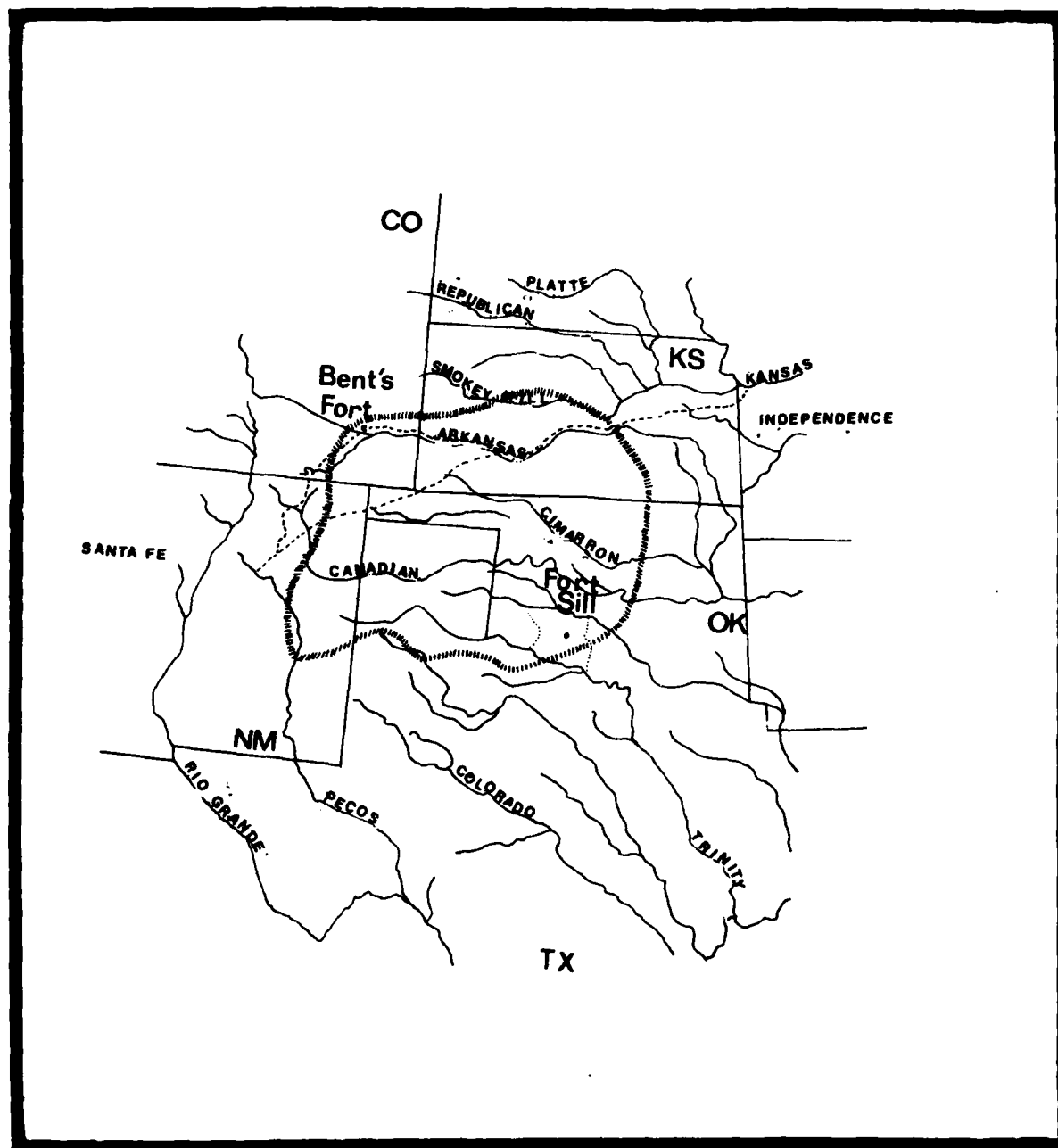
By that time, Trinidad's leaders liked to think that it had around 700 residents, mostly Mexican-Americans, but with an Anglo-American "leaven" which considered itself "the first class." The surviving Native Americans thus fought one another over drastically diminished game and other resources, while the now demographically locally dominant Euroamericans stood by and watched. Warfare indeed continued for some years more, but the restriction of Native Americans to reservations and completely altered economic activities and technologies was only a matter of time.

KIOWA MIGRATION

Numerous historical sources, relying on Native American oral history, place the Kiowa people in the Black Hills area at the end of the Eighteenth Century (Mayhall 1962:32, 77-78) (see Figure 8). They then ranged southward to the Platte River. The Lewis and Clark expeditionaries did not see them, but were told about them. Captain Meriwether Lewis reported that they lived on Paduca fork of the Platte River (Mayhall 1962:33). His word-of-mouth information may have been already outdated.

Lt. Zebulon M. Pike, exploring the Arkansas River in 1806,

Figure 8: Kiowa Territory



KIOWA TERRITORIAL RANGE

(After Mayhall 1962:193)

— Kiowa Reservation

- - - Santa Fe Trail

reported that the Dakota forced the Kiowa south in 1803 to the headwaters of not only the Platte but also the Arkansas River. Like the Apaches, they were armed with Spanish-style lances, and owned large numbers of horses. They fought not only the aggressive Dakota to the north, but also the Utes on their western flank and the Pawnees on their eastern front (Mayhall 1962:36).

The Spanish trade fairs held at Taos clearly attracted the migrating Kiowas. At the beginning of the Nineteenth Century, Dakotas had access to firearms and other manufactured commodities hawked by peripatetic traders based on Great Lakes settlements. The Kiowas did not, and the Pawnees blocked their access to traders based along the Mississippi River and the lower reaches of its western tributaries. Spanish Taos was the nearest alternative source of such goods.

Although the Utes often traded at Abiquiu, they also sought access to the Taos traders. Consequently, Kiowas and Comanches in September, 1806, clashed near Taos. The Spaniards halted the fray. Spanish prohibitions against supplying Native Americans with firearms left tribesmen perennially dissatisfied with the Pecos Pueblo and Taos fairs. Kiowas and their customary wearing apparel were already well-known to New Mexican officials by the fall of 1805 (Loomis and Nasatir 1967:436,429). The Kiowas and Comanches, in 1807, still traveled all the way north to trade with the Mandans on the upper Missouri River (Coues 1895: II:535,743-45), no doubt in quest of a few precious guns.

In 1816, the year without a summer because of the tremendous amount of volcanic debris an exploding Indonesian volcano threw into the stratosphere, the Kiowa suffered high smallpox mortality. The smallpox epidemic spread widely among the Plains peoples.

By 1820, the Kiowas had worked out amicable relations with both Arapahoes and Cheyennes, tribes which had either pursued or followed them south from the Black Hills area. The Kiowas reportedly ranged between the Arkansas and Red Rivers, seeking pasture for their many horses, some of which they traded to the Cheyenne (Mayhall 1962:37). Probably the range that Twentieth Century Kiowas considered traditional had been defined by that time. It was a curving-bounded oblong stretching from the Smokey Hill River tributary of the Missouri in Kansas south to the divide between the Red River and the Trinity-Brazos-Colorado systems in Texas, and from a line almost north-south between some point on the upper Arkansas River to a point on the upper Pecos River to a similar north-south line located a short distance upstream from the Cimarron-Arkansas River confluence (Mayhall 1962:193).

Just how far west Kiowa range extended in 1820 is problematical. Conceivably, Kiowas perceived their territory as extending to the upper Rio Grande, but more likely they conceived the crest of the Sangre de Cristo Mountains as dividing them from

the hostile Utes. Clearly the Kiowas ranged to Taos in order to participate in the trade fairs there, but they probably recognized that they had to cross Jicarilla Apache country and risk confrontations with Utes in order to trade with Spaniards and Pueblo Indians at Taos.

Like the Comanches, Kiowas later, in any case, perceived their range as including the lower half of the Purgatoire River, and the Arkansas River from Bent's Fort downstream almost to the Cimarron River confluence. That perception almost certainly reflected, however, the trading orientation to the Bent-St. Vrain trading post and the Spanish and later Mexican traders who flocked to the south bank of the Arkansas River international boundary opposite the post to trade with the same Native American peoples who patronized the post. In other words, Kiowas visualized their northwesternmost range where they did because they were fully integrated into the world market economy via the New Mexican and Missouri traders operating in or near the triangle formed by the lower Purgatoire and Arkansas Rivers.

In 1820, the Bent-St. Vrain trading post did not yet exist, but Taos traders had, for a number of years, run a trading fair at the mouth of the Purgatoire River. That fair which attracted participants from numerous tribes replaced Taos as the primary trading magnet at the western margin of the Southern Plains. Consequently, Major S.H. Long's exploring expedition encountered Kiowas near the Purgatoire River (Mayhall 1962:40). When the explorers paused to confer with the tribes in the neighborhood, they identified in spite of communication handicaps, chiefs of the Kiowas, Kiowa-Apaches, Cheyennes and Arapahoes. They reported that Arapaho Chief Bear's Tooth influenced all of these peoples (Mayhall 1962:41-42).

The expeditionaries -- at least those officially reporting -- misunderstood the Native American aboriginal social mechanism for insuring amicable trading. The chiefs "politely offered" the visitors women whom the latter took to be their wives. Such hospitality traditionally opened intertribal trading affairs, establishing reciprocity and confidence. The visitors did not understand that, officially at least, and politely declined. Perhaps the Spaniards trading at the fork of the Arkansas River better understood Native American manners (Mayhall 1962:44).

Traders followed Long's expedition to the Rocky Mountains the following year. They encountered a Kiowa camp on the North side of the Arkansas River near the Purgatoire River system. The Kiowas traded a little with the Hugh Glenn party, and a 350-lodge Comanche band soon arrived on the scene. The Comanche chief, whom Long had promised United States presents, became angry when Glenn tried to explain that his expedition consisted of private traders. Then friendly Arapahoes joined the fair, and soon Cheyennes also appeared as did Kiowa-Apaches (Mayhall 1962:55-57).

The Glenn party moved upriver to the Huerfano where there

was wood to burn for warmth. The United States traders met the Spanish traders operating in the area. They failed to persuade the Kiowas to sell them horses even though Jacob Fowler estimated that there were 20,000 horses about the encampment (Mayhall 1962:58-59). The Spanish traders numbered 60, and sold the United States traders maize for \$10 per bushel, mules for \$30 apiece, and racing horses for \$100 each (Mayhall 1962:60-61). When United States traders first entered the Purgatoire River region, horses and mules had long been established as the most valuable commodities bought, sold and traded between members of different ethnic groups. The Spanish traders also exchanged agricultural commodities to Native American hunting and hide-processing specialists, just as Pecos and Taos Pueblos had, and the Mandans did to the north.

The Spanish traders on the Arkansas River frontier attracted Northern Plains tribesmen as well as the Southern Plains groups. Jacob Fowler reported that a party of Crows visited the Arkansas River, even though they fought with the Arapahoes there (Mayhall 1962:61).

By the time St. Vrain and the Bents established their trading post on the upper Arkansas across from the Purgatoire River canyons, Kiowas could exchange horses, mules and other commodities at trading posts on their northwestern and eastern frontiers. The United States Indian removal policy forced Creeks, Cherokees, Osages and other tribes into Indian Territory (modern Oklahoma). There they constituted a ready and large market for Indian traders (Mayhall 1962:71). A pioneer trading post was near modern Purcell, Oklahoma, at a spring on a creek near the Canadian River in Comanche territory. A later post in Kiowa country was three miles from modern Fort Sill (Mayhall 1962:74). At mid-decade, in 1835, Colonel Henry Dodge reported, although he met no Kiowas on his scouting expedition, that they numbered 1,800 to 2,000, ranging between the Arkansas and Platte Rivers near the Rocky Mountains (Mayhall 1962:75).

The lethal smallpox virus which swept through most Plains tribes in 1837, reportedly struck the Kiowas in 1839-40 (Mayhall 1962:77,150). The mortality that it caused may have persuaded the Kiowas and neighboring tribes that they had to work out amicable relations in order to survive Euroamerican pressures.

The Cheyennes and Arapahoes forced both Kiowas and Comanches southward as they themselves were forced south by the expanding Dakotas. Fighting between the Cheyenne-Arapaho allies and the Kiowa-Comanche allies became particularly bitter around 1826. William Bent recognized that his trading profits would rise if his post could attract more customers than the Cheyenne and Arapaho. The United States Dragoons that scout Col. Henry Dodge led in 1835, William Bent's influence as he sought intertribal peace and trade, and the smallpox mortality all played their roles in persuading chiefs of the warring tribes to change the military situation on the Southern Plains. No doubt the continued forced migration of eastern Native Americans into

Indian Territory also influenced the Southern Plains groups to join forces. Kiowa-Apaches served as crucial mediators (Mayhall 1962:78).

During the initial negotiations, Cheyennes met Kiowas at Two Butte Creek, with a few Comanche and Kiowa-Apache leaders present. The representatives smoked together, and the Kiowas offered the Cheyenne the scalps of Bow String warriors the former had slain. Cheyenne High-Backed Wolf rejected the offer because it would only upset his people. Kiowa chief Dohasan refused gift horses, but accepted many blankets. Everyone joined in feasting (Mayhall 1962:79).

The Cheyennes selected a conference ground about three miles downstream from Bent's Fort, about halfway to the Purgatoire River mouth. The Kiowas encamped up river, but not in the formal circle reserved for Sun Dances only. The Cheyennes invited the Kiowa and Comanche chiefs to a feast the first day. Kiowa Chief Dohasan then invited the Cheyennes to visit the Kiowa camp across the river the second day. Satank handed each man, woman, and child a stick, representing horses. All the Kiowas reportedly gave horses, Satank alone more than 250 animals. Thus, the most valued possession sealed the peace. The following day the Cheyennes and Arapahoes fed the Kiowas, Comanches and Kiowa-Apaches, and loaded them down with firearms, blankets, calico cloth, beads, kettles and other presents. The Cheyenne and Arapaho cooks pleased their visitors with such Euroamerican foods as rice, dried apples and molasses from New Orleans. Then the chiefs told the people that they could trade (Mayhall 1962:80).

Five years later, Lt. Abert visited Kiowas ranging southeastward from Bent's Fort and the Purgatoire River canyons. The Kiowa range centered on the Southern Plains, although Kiowa access to manufactured goods at Bent's Fort was an important factor in tribal life. Aggressive Texans pressed hard against Comanche and Kiowa southeastern frontiers, and alternative trading posts were necessary. Abert met in the midst of Kiowa country on the Canadian River persons who had seen him at Bent's Fort (Mayhall 1962:87), indicating how far and quickly Kiowas then traveled to trade.

United States Indian removal of eastern tribes during this period to Indian Territory, Nebraska and Kansas generated intertribal conflicts on the Plains as more and more ethnic groups competed for fewer and fewer bison, elk, antelope and deer. The Kiowa became embroiled with Sac and Foxes, Osages and Quapaws. In the opposite direction, Mexican haciendas in Chihuahua furnished many horses Kiowas stole.

THE SUN DANCE. Under stressful conditions, the Sun Dance became more of a cultural focus among Kiowas as well as other Plains peoples. The Sun Dance appears to have been a post-horse Plains Indian invention. It may have been created as early as 1700 by the Cheyennes. Beginning about 1750, the ceremony spread

quickly to the High Plains nomadic peoples. "From the late eighteenth to the mid-nineteenth century the Sun Dance ceremony was the grandest of all the aboriginal religious ceremonies performed by Plains tribes" (Jorgensen 1972:17).

Ritual details varied from tribe to tribe. Typically, an individual made a vow to sponsor a specific performance. The vow usually sought to avenge someone's death, to help the person lead a successful hunt, or to increase the bison supply. Every tribe did not necessarily hold a Sun Dance each year, inasmuch as the ritual depended on someone making the requisite vow.

The Sun Dance ceremony itself included men dancing three or four days and nights, accompanied by drumming and songs. Dancers frequently subjected themselves to penance: fasting, going without water, mutilation. They were motivated by a desire for power, war and hunting success, individual health and group welfare.

Some tribes carried out a ceremonial bison hunt as part of their Sun Dance, and carried out divination concerned with warfare (Jorgensen 1972:18). After Sun Dancing peoples were confined on reserved lands, ceremonial leaders shifted the ritual emphasis from war and hunting to curing individual illnesses and fostering group solidarity (Jorgensen 1972:19).

The Sun Dance ceremony includes erecting a central pole, with a corral around it. These structural elements are built anew for each vowed ceremony. Consequently, they lack the brick-and-mortar permanence of a Christian church. The Sun Dance leaders in charge would not allow the ritual structure to be erected on profaned ground. By definition, any Sun Dance ground shares in the holiness Plains peoples typically attribute to the earth. This contrasts with Christian behavior toward churches, which may be built on any city street corner. Many Christian denominations possess a consecration ritual to sanctify the building once it is erected, and to desanctify it when it is abandoned. The latter class of ritual is not present among the Plains peoples engaging in the Sun Dance.

In 1856, the Kiowas held their Prickly-Pear Sun Dance when the cactus fruits ripened near Bent's Fort (Mayhall 1962:158). Given the distribution of Opuntias in the Purgatoire River canyons, with the Southwestern large species beginning slightly to the south of the Arkansas River (Emory 1846; USA field notes), the remains of the 1856 Kiowa Sun Dance Lodge probably are located in, or very near, one of the tributary canyons.

The Kiowas remained near Bent's Fort during the 1856-1857 winter. They attacked the Navajos while the rest of the group hunted bison. Rolling up their tipis, they left them with William Bent, who distributed them to Cheyennes. Nevertheless, the Kiowas did not move very far away, holding their 1857 summer Sun Dance on Elm Creek at Salt Fork of the Arkansas River. A forked chinaberry stick left inside the medicine lodge as a

sacrifice sprouted and grew. The geographic range of Kiowas was illustrated by their raids that year at El Paso to the south, and against Sac and Foxes to the north. They again camped near Bent's Fort during the 1857-1858 winter (Mayhall 1962:159).

The Bent's Fort trade evidently was very important to the Kiowas during the middle 1850s. In addition to pressure on the eastern border of Kiowa country, Kiowas faced Ute attack on the western frontier. In 1859, Utes fought Kiowas on the headwaters of the South Canadian River. That summer, an abundance of bison drew the Kiowas north to the Smokey Hill River. In 1860, however, some of the Kiowas were back south of the Arkansas River (Mayhall 1962:160).

Smallpox struck the Kiowas again in 1861, one man having purchased a blanket in New Mexico (Mayhall 1962:161-162). After the 1864 Sun Dance at the confluence of Medicine Lodge Creek and Salt Fork of the Arkansas, the Kiowas camped near Fort Larned, Kansas, on the Arkansas River. Set-angia (Satanta) approached the post and a sentry warned him away. He did not understand, the sentry threatened to fire, and Set-angia put an arrow into him. Another Kiowa, not a Mexican as in a contemporary newspaper account (Rocky Mountain News 1 August 1864) fired a pistol at the sentry. The Kiowas stampeded the post horse herd and departed (Mayhall 1962:163). During the War of the Rebellion, the Kiowas were subject to genocidal Union Volunteer unit campaigns as well as Ute and Jicarilla Apache attacks.

In 1867, the Navajos supposedly interned at Fort Sumner on the upper Pecos River stole a herd of ponies from Kiowas and Cheyennes attending their Sun Dance on the Washita River. The Kiowa pursued and recovered their mounts. Kiowa-Navajo hostilities continued into the winter (Mayhall 1962:166).

That winter the United States negotiated a peace treaty with Cheyennes, Arapahoes, Kiowa, Kiowa-Apaches and Comanches. The United States did not immediately achieve peaceful inter-ethnic relations. The Utes in the summer of 1868 captured the Kiowa sacred palladium, only to give the images to trader Lucien Maxwell because of the bad fortune they brought their captors (Mayhall 1962:167).

The final pacification of the Southern Plains peoples actually did not occur until a series of United States army campaigns in 1874 roused the Kiowas, and their Comanche and Cheyenne allies out of their last refuge areas. At the end of September, Colonel Ranald Mackenzie routed Kiowas, Comanches and a few Cheyennes from Palo Duro Canyon. In October, Lt. Col. G.P. Buell struck Kiowas in Indian Territory. Major W. Redwood Price's Eighth Cavalry contingent hit other hostiles in Texas. By December the conflict ended (Mayhall 1962:252). The army sent a number of hostile individuals to Fort Marion, Florida (Mayhall 1962:172).

The victors recognized Kicking Bird as principal Kiowa

chief, delegating to him responsibility for choosing the recalcitrants to be taken to Florida. Hostile chiefs, warriors and even Mexican captives to the number of 70 went (Mayhall 1962:253). That winter the Government issued the Kiowas 3,500 sheep and goats, and 600 cattle purchased with money raised by selling their horses (Mayhall 1962:172).

A decisive symbolic act also occurred in 1875. The United States organized the first unit of Kiowa Indian Scouts. The Kiowas now were dependent on the Euroamericans and effectively reduced to reservation life on lands far from the Purgatoire River canyons (Mayhall 1962:173). The 1874 outbreak, and the forced sale of Kiowa horses left them so bereft of mounts that when Mexicans stole one man's horses during the 1876 Sun Dance, the remaining horses gave out during the pursuit and the thieves escaped (Mayhall 1962:172). The fortunes of ethnic horse thieves had been reversed. The government erected ten Euroamerican style homes for as many chiefs in 1876. The recipients treated the homes as show places, but did not live in them. Epidemic measles struck the Kiowas in 1877, and in 1878, the government returned the prisoners from Florida. In 1879, the United States consolidated the Kiowa And Comanche Agency with that for their former enemies, the Wichitas and Caddoes, at Anadarko (Mayhall 1962:256).

The quest for horses and trade lured the Kiowa people south to the upper Arkansas River and Purgatoire River areas. There Kiowas could trade with Spaniards from Santa Fe and Taos, obtain agricultural products, some manufactured goods, and in time, whiskey. There, and further east on the Plains, the Kiowas found a base from which to raid Mexican ranches for livestock. Between 1864 and 1875, the United States unhorsed the Kiowas, ending their historic lifeway and reducing them to dependency.

ARAPAHO INTRUSION

The southwest migration of the Arapaho people illustrates well the relative rapidity of movement of additional tribal groups into the Purgatoire River canyon zone. They divided into Northern and Southern bands during the 1830s, but had separated from the Gros Ventres not long before that (Trenholm 1970:4). No division was discernible prior to the late Eighteenth Century (Trenholm 1970:11). Like several tribes in the post-horse big-game hunting culture area, the Arapaho preserved a legend about the Gros-Ventre-Arapaho separation. An epidemic disease frightened the people, so they fled south, crossing a wide stream, which was frozen over with ice. One-third crossed; one-third was on the ice; one-third was north of the river. A child, or perhaps a young woman, wanted a horn protruding from the ice. When people started chopping at it, a monster arose, broke the ice, and the third of the people crossing drowned. The Gros Ventres remained north of the stream, and the Arapahos were south of it (Trenholm 1970:16).

From what is documented about Arapaho geographic locations at the end of the Eighteenth Century, and about the epidemiology of the area, the "unknown time" of the plague can be hypothesized with some assurance. The most lethal epidemic which swept through the Northern Plains during the latter half of the Eighteenth Century was the smallpox in 1780-81 (Dobyns 1966:441; Wissler 1936:36; Mallery 1886:131; Thompson 1916:322-23; Gibbs 1877:208).

In 1772, a British fur company explorer encountered the Fall Indians -- an English name for the Gros Ventre -- in Saskatchewan. They hunted bison on foot using a pound and embankment. They lacked sufficient horses to use them to surround a bison herd (Trenholm 1970:19-20). In the fall of 1780, the British traders built Buckingham House, their initial trading post for the Gros Ventre and Blackfeet. In 1781, the lethal smallpox virus killed an unknown number of these people, the southern Blackfeet having contracted it when they raided a Shoshoni village of sick and dying people (Trenholm 1970:21).

In the aftermath of the mortality, a North West Company trader, in 1789, reported two Gros Ventre divisions. The southern division lived from the north bend of the Missouri River to the south bend of the Assinibone, and numbered 700 men (Trenholm 1970:22). A French Canadian trader found the Arapaho (called Kananavich) allied with the Cheyennes on the Upper Missouri and in 1795, on the Platte (Trenholm 1970:23). A Blackfeet chief trading with Hudson's Bay Company in 1801, drew a map showing tribal locations. He indicated 80 tents of Tattooed People or Arapahoes near the Rocky Mountains well south of the Missouri River (Trenholm 1970:26).

By the time Lewis and Clark initiated United States exploration of the Louisiana Purchase area, they reported that the Kananavich inhabited the area between the Paduca Fork of the Platte River and the Southern Fork of the Cheyenne River. Clearly the Arapaho were migrating southward at a fairly rapid rate (Trenholm 1970:29). In 1806, Alexander Henry reported the Kananavich living near the sources of the Platte and Cheyenne Rivers (Trenholm 1970:30).

English-speaking explorers and traders during this early Nineteenth Century period at times referred to the Arapahos as "Blue Bead Indians." This appellation may have originated in quarrying obsidian from Blue Bead Quarry near modern Cody, Wyoming, or acquiring New Mexican turquoise by trade. Only in 1810 did the tribal designation Arapaho come into use. Then, it was an alternative name for the Blue Bead Indians, credited with fashioning a spectacular buffalo robe worked with split quills dyed red and yellow, and entirely bordered with fawn hoofs which sounded with every movement of the wearer (Trenholm 1970:31).

When the Arapahoes did cross the Missouri River and moved southwestward, they occupied essentially the same kind of mixed

environmental niche as the southeastern Utes. They have been considered Plains Indians, but they only ventured out into the open Plains seasonally to hunt bison. They wintered in sheltered valleys watered by clear streams on the Rocky Mountain eastern slope (Trenholm 1970:33). This pattern of riverine oasis and especially mountain valley winter residence has been underemphasized in many studies of so-called "Plains" Indians. Indeed, drawing the western boundary of the "Plains" culture area at the eastern base of the Rocky Mountains (Wedel 1961) ignores the historic reality of Native American behavior.

From the Arapaho viewpoint, the Rocky Mountains were a barrier between them and hostile Utes on the western slope. Mounted Arapahos had a military advantage over the Utes on the open Plains, but the Utes held the advantage in the mountains (Conner 1970:119). Although the Arapaho were migrating southward toward and into the former Comancheria, they reportedly maintained pacific relations with the Comanches and Kiowas as well. In 1811, the Arapahos were still living in the headwaters of the Platte River, but the now extinct Arapaho South People may have already been on the Arkansas River frontier (Trenholm 1970:34) of New Spain.

In 1812, the Arapahoes wintered on the South Platte, but warriors ranged north to fight Crows who sometimes raided them (Trenholm 1970:39). They apparently sponsored an intertribal trading fair on the Horse Creek, a Platte River tributary. In 1813, Comanches traded Spanish horses for Cheyenne trade goods. Sioux and Kiowa also participated.

In 1820, Stephen H. Long encountered both Arapahoes and Cheyennes on the Arkansas River. An Arapaho chief named Bear's Tooth led both allied peoples. Long missed most of the warriors because they had gone 19 days' journey south to raid Mexicans on the Colorado River (Trenholm 1970:43).

This report of far Southern raiding by Arkansas River Arapahoes well illustrates the difficulty, and indeed the fallacy, of depicting intertribal boundaries along streams, at least in this area. The High Plains are (in practical effect) a desert as far as human habitation is concerned. The High Plains are "a relatively flat, almost featureless upland" vegetated by "buffalo and grama grasses" or sage on sandier soils with trees along river channels (Wedel 1963:2). "In terms of aboriginal human occupancy, the High Plains must be considered a region of limited possibilities (Wedel 1963:3). As Walter P. Webb (1931) pointed out, only the perfection of windmill water-pumping technology allowed Euroamerican farm colonization of the Plains. Native Americans venturing into the Plains to hunt bison or other big game necessarily carried water in containers. Bison paunches filled with water met this need, for pack dogs as well as people (Wedel 1963:12). Although Native American Plainsmen utilized upland pond and spring waters (Wedel 1963:4), they based themselves on riverine oases. All of the post-horse High Plains bison hunting peoples pursued gameherds across the uplands during

the summer, but took winter shelter in woods growing along streams or ponds (Wedel 1963:9). The perennial rivers furnished domestic water that did not freeze. The woods supplied firewood for cooking and heating homes. A stream such as the Arkansas River was, therefore, anything but a boundary. Drainage divides on either side of a stream might demarcate tribal boundaries, but people who occupied a river valley ranged out in both directions from it.

Euroamericans conceptualized the Arkansas River as a boundary, as when the United States-Spanish boundary was placed along that stream. Ethnographers fall into the same trap when drawing tribal territorial boundaries (Wallace and Hoebel 1952:7). Arapahoes who raided 19 days' travel into Mexico certainly would not have neglected the rich natural resources of the Purgatoire River canyons one and two days travel south of the mainstream. If Arapaho-Comanche relations were truly pacific, then archaeologists attempting to interpret housing and artifactual remains in the Purgatoire River area face true difficulties. For members of both ethnic groups could very well have lived in the Purgatoire River canyons sheltered from the winter winds at the very same seasons, along with Cheyennes allied with Arapahoes.

William Bent sought the Cheyenne trade, and many Cheyennes left the Black Hills area to join the Arapahoes on the Arkansas River. That migration divided the Cheyennes into their later Northern and Southern divisions, parallel to the Northern and Southern Arapahoes. Trading posts on the Missouri River were magnets keeping the northern portions of these ethnic groups in that area (Trenholm 1970:50). The territorial division of the Arapaho and Cheyenne tellingly illustrates the fundamental role that Euroamerican traders played in the development of "classic" Plains culture area patterns.

The post-horse, post-gun, big game hunting, hide and pelt and horse vending culture area absolutely depended upon Euroamerican trade goods. Firearms and munitions were essential to the hunt and wars of conquest and glory. Metal blades and cookware also became indispensable, and beads joined porcupine quills and dentalium shells. At the end of the Eighteenth Century, Arapahoes sheltering in the Eastern Slope valleys "led a wild life, untouched by European civilization" (Trenholm 1970:33), it has been claimed. They were, on the contrary, long since firmly committed to international trade. They acquired and to a considerable extent already depended upon Euroamerican commodities, even though they acquired them through Native American traders. By 1830, they were well integrated into the World market economy.

Like the Apaches and Comanches before them, the Arapahoes living along the Upper Arkansas River raided Mexican towns in New Mexico. Enmity was well ingrained by 1831, despite the relative recency of Arapaho arrival on the frontier. Between 1831 and 1841, Arapaho raiders apparently traveled regularly along the

Purgatoire River route from the Arkansas River to the northern New Mexican Pueblos and towns. Charles Bent actually met one war party on the Purgatoire -- Rio de las Animas -- which had traveled two weeks and had taken eight scalps, ten horses and two guns (Trenholm 1970:114).

During the decade of the 1840s, the United States Government sought to suppress the trading of liquor to Plains natives. Trading post operators were culprits along the Missouri River. On the Arkansas River international frontier, however, Mexican peddlers provided the booze, and the Government dispatched a company of Dragoons to try to halt the traffic near Bent's Fort (Trenholm 1970:118).

In 1851, the United States negotiated a treaty with numerous Plains tribes. The Ft. Laramie Treaty recognized Arapaho lands as extending south from the North Platte River to the Arkansas River mainstream (Trenholm 1970:137). A decade later Commissioner A. B. Greenwood negotiated a cession reducing the vast reservation. He proposed that the Arapahoes and the Cheyennes settle both sides of the Arkansas River upstream from the mouth of the Purgatoire River. The Sand Creek Reservation set aside, however, was a comparatively small area north of the Arkansas River opposite the mouth of the Purgatoire River (Trenholm 1970:137, 162).

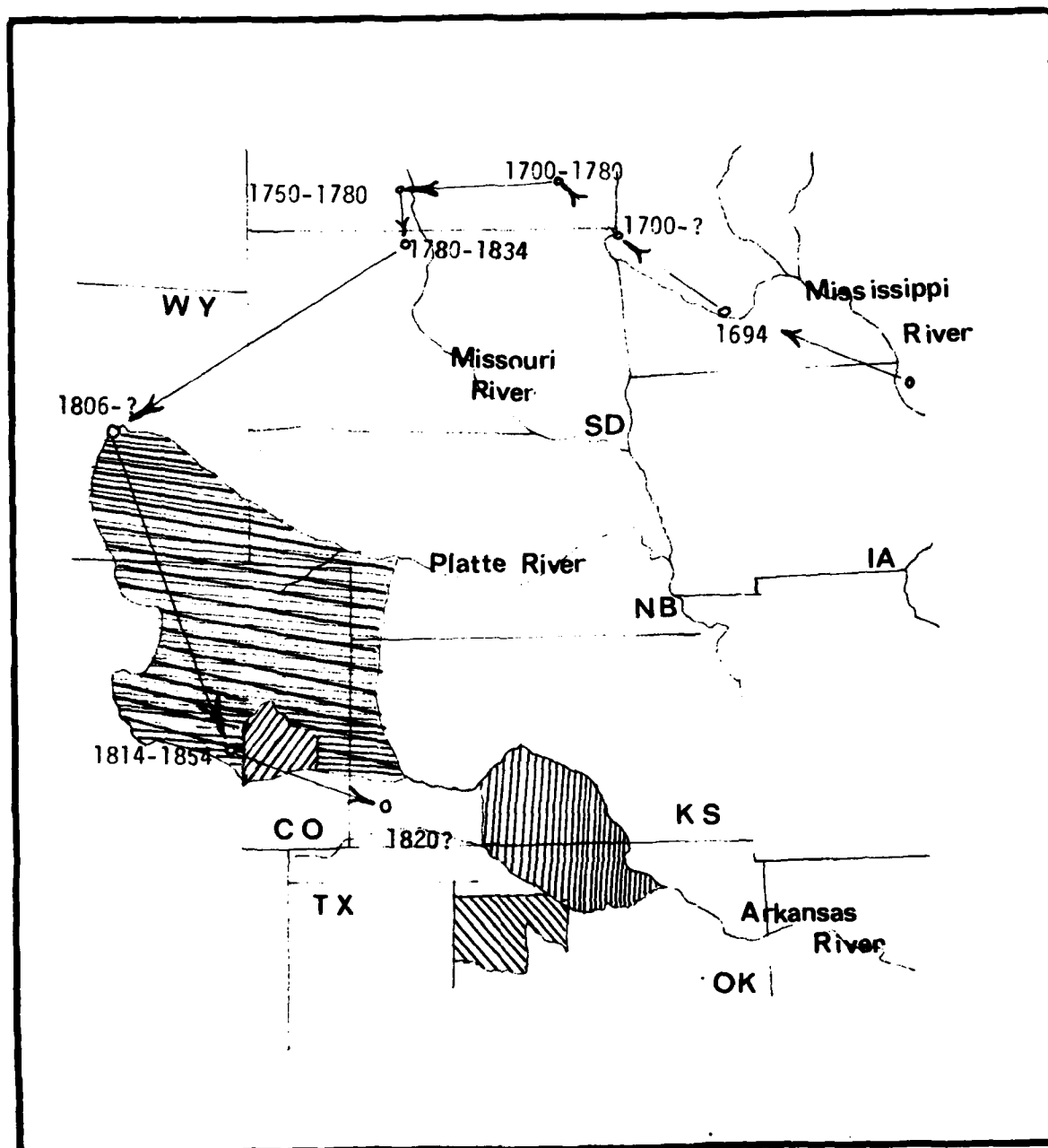
The Purgatoire River canyon was a favorite wintering area for the Arapahoes and Cheyenne. In 1860, a United States army expedition sighted evidence of their old encampments 20 miles (plus or minus) from the Arkansas River (Wedel 1963:10; Stuart 1959:235).

In 1862, the smallpox virus again invaded the Arkansas River natives, this time Kiowas and Comanches downriver from Fort Wise (Trenholm 1970:166). Two years later, the Sand Creek Reservation became the scene of one of the most infamous Euroamerican massacres in the United States history, when troops led by Col. J.W. Chivington led an attack on men, women and children (Trenholm 1970:193). Half a decade later, the Cheyenne and Arapaho were removed to a reservation in western Indian Territory between the Washita and Canadian rivers for the most part (Trenholm 1970:137). They were thus finally removed from the Purgatoire River canyon and its rich game and wild plant food resources.

CHEYENNE INTRUSION

The Algonkian-speaking Cheyenne people once lived, according to tradition, beside a large lake where they caught fish with seines (see Figure 9). A French explorer's map drawn possibly prior to 1673 shows the Cheyenne above the Wisconsin River mouth. A Cheyenne delegation visited the Sieur de La Salle when he built a fortification on the Illinois River in 1680. The Cheyennes

Figure 9: Cheyenne Migrations and Reservations



CHEYENNE MIGRATIONS AND RESERVED LANDS
(After Berthrong 1963)

-  - Treaty of Fort Laramie, 1851
-  - Treaty of Fort Wise, 1861
-  - Treaty of Little Arkansas, 1865
-  - Executive Order Cheyenne & Arapaho, 1869

urged the Frenchman to visit them up the Mississippi River. In 1695, Governor Diego de Vargas of Spanish New Mexico reported a visit by the Apaches' "enemies" called "Chiyenes," suggesting that members of this group either ranged very widely over the Plains, or that there was already a Southern Cheyenne tribe -- or the coincidence was just that.

Another French map drawn in 1684 and revised in 1688, shows the Cheyennes known to Frenchmen living on the Minnesota River. Earthworks on Yellow Medicine River, a southern tributary of the Minnesota, are attributed to the Cheyennes. The Oto people lived west of them at that time (Berthrong 1963:4-5). Dakotas, Crees and Assiniboinis gained access to firearms before the Cheyennes, and traders may have urged them to attack Native Americans groups trading with rival Europeans, fostering international conflicts which affected the Cheyennes. As a consequence of these pressures, and epidemic disease mortality, the Cheyennes migrated to the Sheyenne River in modern North Dakota.

Cheyenne earth lodges were similar to those of the Caddoan and Siouan tribes cultivating riverine oases in the prairies. While living on the Sheyenne River, these Algonkian-speakers acquired horses, glass beads, and metal blades, but apparently not firearms. They hunted bison (Berthrong 1963:6). They were, however, still horticultural, and Cheyennes continued to cultivate food crops until mid-Nineteenth Century (Grinnell 1956:3).

SACRED ARROW RENEWAL CEREMONY. Foremost among the religious ceremonies of the Cheyenne was the Sacred Arrow Renewal ceremony. The Cheyenne people devoutly believed that their tribal Sacred Arrows could bring them supernatural assistance in certain group crises. These crises included sickness and murder within the tribe. When such a crisis occurred, a member of the Council of Forty-four carried a pipe to the Sacred Arrow Keeper and his four priestly assistants to petition for a renewal ceremony (Powell 1969:II:482). The Sacred Arrow Renewal "was the supreme act of Cheyenne worship" (Powell 1969:II:483). Ideally, every Cheyenne joined in the special, sacred, tribal encampment where the ceremony was conducted.

Cheyennes engaged in four days of preperation preceding the actual Sacred Arrow Renewal Ritual. The tribal-scale encampment appeared on the first of these preliminary days. On the second preliminary day, the council member who pledged the ceremony carried presents which his family had been accumulating for months to the Sacred Arrow Keeper and his assistants. The pledger received a new personal name (Powell 1969:II:486). Members of the pledger's warrior society assisted him in erecting a large ceremonial tipi (Powell 1969:II:487). Priests sang a sequence of 141 sacred, wordless songs through the night (Powell 1969:II:489). On the third preliminary day, the keepers carried the Arrow bundle to the ceremonial tipi. The Arrow Keeper uncovered the Sacred Arrows from their kit fox skin quiver, and lashed them to the special ceremonial pole "forced into the

earth" inside the tipi (Powell 1969:II:490). Then the keepers began the ceremonies. On the fourth preliminary day, the Cheyennes struck their entire camp, and set up a new one several yards away. The people spent this day rejoicing (Powell 1969:II:493).

A central activity of the first of the four Arrow Renewal Ritual days was melting glass beads into a rectangular piece of blue glass representing the Blue Sky (Powell 1969:II:495-96) with the Sacred Arrows removed from their bundle and displayed (Powell 1969:II:875-881). The second day's rituals emphasized sacred herbs, and included burying 500 braided strands of sweetgrass. Arrow makers began handling the Sacred Arrows (Powell 1969:II:881-85). On the third ceremonial day, the priests tied seven symbolic substances with the Sacred Arrows. These included trade goods -- red strouding, a white woolen blanket, and tin bucket besides the melted glass beads -- and a calf hide (Powell 1969:II:885-890). This apparently terminated the ritual aimed at restoring health to the Cheyenne people after disease struck them.

When intratribal murder disturbed the Cheyennes, the Arrow Renewal Ritual continued through a fourth sacred day, when the arrow makers actually refletched the arrow shafts, and rebound the stone points to the shafts (Powell 1969:II:891-95). The warrior societies dismantled the Sacred Lodge after the renewal ceremony. They replaced it with a large Spirit Tent lodge with a smaller spirit tent inside, where the third night's ceremonies were repeated (Powell 1969:II:895).

Cheyennes migrated from the Sheyenne River westward to the Missouri River, but the date is unknown. One fur trader wrote at the beginning of the Nineteenth Century that the Chippewas attacked the Cheyennes about 1740, "destroying their village" so that the "nearly exterminated" tribe fled across the Missouri River (Berthrong 1963:7). Another trader recorded another Chippewa boastful war tale. The northern group traded with the Cheyennes for their maize and vegetables until it discovered a Cheyenne hunter carrying a fresh Chippewa scalp. The northern group then sent 150 warriors through the woods to attack a Cheyenne village after its warriors had left to hunt. Killing all save three women, the Chippewas fired the dwellings and retreated precipitously to avoid meeting the mounted Cheyennes on the open Plains. This attack occurred between 1770 and 1790 (Berthrong 1963:8).

At least two Cheyenne groups or "tribes" remained distinct until the 1830s (Grinnell 1956:4). It is most probable, therefore, that the Nineteenth Century Cheyenne polity resulted from a series of amalgamations of earlier Algonkian-speaking peoples speaking somewhat different dialects who were decimated not only by Chippewa attacks on single villages, but also by epidemic diseases which depopulated many settlements. Probably Cheyennes moved from the Sheyenne River to the Missouri River gradually, village by remnant village, instead of all at one

time. Smallpox spread through virtually all of the Great Lakes area tribes in 1757 and again in 1781-1783, with less lethal epidemics in the 1760s and 1790s. Migrating after high disease mortality was a general Native American pattern (Dobyns 1983:313-17), and Cheyennes would have been no exception.

When Cheyennes lived on Porcupine Creek in present North Dakota, their cultivated fields extended along both sides of the stream (Berthrong 1963:9). Dakota oral history dates the abandonment of the Porcupine Creek settlement to the period of the lethal 1781-1783 smallpox pandemic. The Cheyennes then moved almost due south along the Missouri River to Grand River in modern South Dakota. Cheyennes still acquired European goods via Arikara middlemen (Berthrong 1963:10).

Probably about this time, the Cheyenne discovered the basic principle of the hide-horse trading economy that dominated the peoples moving into the Plains natural area. "Good horses were constantly in demand in the Plains tribal economy itself." Mounts were needed for hunting, but also "...for accumulation of goods to be used in trade" (Jablow 1951:15). The large Comanche horse herds, constantly replenished by raiding Mexican ranches, certainly helped to lure the Cheyennes southward (Jablow 1951:24).

By the early Nineteenth Century, Cheyennes ranged far southwest of the Missouri River. They had reached at least the Platte River, hunting beaver to trade to Dakota middlemen. They ranged through the Black Hills (Berthrong 1963:12). Half a dozen ethnic groups then inhabited the Cheyenne River headwaters area: Cheyennes, Arapahoes, Crows, Kiowas, Omahas, Poncas, and Kiowa-Apaches. By 1805, the Cheyennes appear to have left the Missouri River Valley (Berthrong 1963:13). They were already oriented toward Spanish New Mexico, where they traveled to steal -- or trade for -- horses, which they traded to the Missouri River Arikara (Berthrong 1963:14). By late 1805, Spanish officials in New Mexico knew that Kiowa traders carried New Mexican goods to the Cheyennes (Loomis and Nasatir 1967:443). In 1806, near the Missouri River, a fur trader met Cheyennes who owned Spanish clothing and reported wintering 200 to 250 miles south of the Black Hills. They hunted with Arapahoes (Berthrong 1963:16).

In June of 1811, an English traveler saw Cheyenne traders arrive at the Arikara villages. They carried ornate Arapaho robes, and brought Spanish horses (Berthrong 1963:18). The Cheyennes may very well have been boasting to the Arikaras, or European observers unfamiliar with Native American trading networks inferred that purchased horses had been stolen. The Cheyennes traded with Arikaras, and other Native Americans, so it is quite likely that they went to the Spanish trade fairs at Taos Pueblo or at the mouth of the Purgatoire River to acquire New Mexican horses. Commodities the Cheyennes exchanged on the Missouri River clearly prove that they already had a New Mexican orientation by 1811.

During the next decade, if not before, the Cheyenne people separated into northern and southern branches, although the groups continued to interact frequently. In fact, they still do. The northern thrust is clear. Both Cheyennes and Oglala Sioux came into conflict with Crows over hunting territory west of the Black Hills. These Absarokas wiped out a Cheyenne Bow String 32-warrior party in 1819. So in 1820, the Cheyennes and Oglala mobilized on a large scale and captured an Absaroka village. Apart from those killed, they captured more than 100 young women and boys whom they married or adopted (Berthrong 1963:17; Grinnell 1956:31-42).

Earlier, in 1813, Cheyennes carried Great Lakes area trade goods to an intertribal fair on Horse Creek tributary of the Platte River. They exchanged their stock for Spanish horses Comanches brought to the fair, as already stated (Trenholm 1970:39). There was, in other words, more than one trade fair where Cheyenne traders might obtain Spanish horseflesh.

By that time, Arapahoes were presumably migrating rapidly to the Arkansas River and the Cheyennes soon followed them. St. Louis traders seeking commerce with Arapahoes in the Arkansas River headwaters were arrested by Spanish officials in 1815 (Berthrong 1963:19). Before their arrest, they met Cheyenne traders at another intertribal trading fair on Cherry Creek near modern Denver, where Kiowas, Arapahoes and other tribes gathered to exchange commodities. The Cheyenne traders were not so numerous on the Arkansas River in 1820 as were Arapahoes (Berthrong 1963:20).

In 1821, United States traders following the official expedition of the year before encountered 200 Cheyenne lodges on the Arkansas River. Kiowas, Comanches, Kiowa-Apaches and Arapahoes occupied another 700 lodges in the trading encampment (Berthrong 1963:21). Such numbers on the Arkansas River implied utilization of nearby Purgatoire River canyon natural resources by one of more of the interacting ethnic groups.

Evidently trade relations enabled the Cheyennes to remain friendly with Kiowa, Comanche, and Kiowa-Apaches who preceded them or migrated to the Arkansas River about the same time. On the other hand, the Cheyennes intruded onto Ute lands as they moved southward, and engaged in enduring warfare with the Numic-speakers holding the Rocky Mountains immediately west of the High Plains (Grinnell 1956:7).

In 1824, a literate trapper reported that Cheyennes had made peace with Pawnees on the Little Smokey Hill River (Pattie 1905:49). In later years, that was productive Southern Cheyenne hunting territory. A year later, the Cheyennes signed a United States treaty for the first time when General Henry Atkinson ascended the Missouri River. Most Cheyennes then still resided west of the Black Hills, an estimated 3,000 people including between 550 and 600 warriors (Berthrong 1963:22).

The following year, the Cheyennes and their Arapaho allies for unknown reasons broke with the Comanches and Kiowas. The break may have resulted from the temptation to steal horses from the Comanches and Kiowas instead of trade for them. The latter stole livestock in Mexico. The Cheyennes and Arapahoes who stole from them in turn lost horses to the Pawnees (Grinnell 1956:38).

Cheyennes fought both Kiowas and Comanches in 1828 near the Arkansas River international boundary. Santa Fe trader Alphonso Wetmore met some Kiowas south of Cimarron River who had stolen horses from the Cheyennes, only to have the owners pursue, recover their stock, and kill some Kiowas (Berthrong 1963:23). Comanche Chief Bull Hump led a large contingent to trade at William Bent's early Arkansas River post in 1828. The Comanches, seeing Cheyenne moccasin tracks, scouted the camp location on Bijou Creek. The Comanches ran off all the Cheyenne horses at night. Perhaps 20 Cheyennes were chasing wild horses along the Arkansas River at the time. Returning home via Sand Creek, they smelled smoke (Grinnell 1956:39). They located and ran off the Comanche horse herd, and then discovered that it included Cheyenne horses. Making a determined charge, the Cheyennes persuaded pursuing Comanches to turn back, thus recovering their lost ponies with interest (Grinnell 1956:42). The Comanche route to the trading post probably crossed the Purgatoire River whatever route these Indians followed en route back home after exchanging commodities.

The Bent-St. Vrain adobe trading post was not to be constructed north of the Arkansas River for another five years. When it began operations, it promptly captured the Cheyenne trade previously centered at Fort Pierre on the Missouri River. The company also built Fort St. Vrain on the South Platte River to trade with Cheyennes and Dakotas, competing quite directly with the Missouri River trading establishments (Berthrong 1963:26).

Secretary of War Lewis Cass sent Colonel Henry Dodge on a broad sweep across the central Plains in 1835 to promote intertribal peace. At Bent's Fort, Dodge found Cheyenne encampments on both sides of the Arkansas River. That placed one camp on the Purgatoire River canyon side, but the Cheyennes were more interested in Mexican whisky peddlers than Purgatoire River natural resources. Comanches traded at the post despite Cheyenne and Arapaho hostility, probably using the Purgatoire River oasis as their last halting place en route to and from the trading post. Catering to the military cant of Euroamericans, the Cheyennes blamed Dakota aggression for their migration from the Missouri River (Berthrong 1963:77) rather than mundane commerce.

At this period, Charles Bent reported that the Cheyennes -- probably those trading at the Bent-St. Vrain post -- numbered 2,800 individuals, whereas the Arapahoes did not number more than 1,000 persons (Berthrong 1963:78). Such numbers required not only Euroamerican agricultural products from the trading post, bison and other big game meat, but also wild food products from

the Purgatoire River system close to the post.

Despite United States peace initiatives, intertribal hostilities continued. In 1837, 14 Cheyenne raiders from the South Platte River traveled to a tributary of the Red River in Texas to steal Comanche and Kiowa horses (Grinnell 1956:13). The allied Comanches and Kiowas killed them all (Grinnell 1956:16). In 1838, some 48 Cheyenne warriors ventured into Kiowa territory. They all died in battle on a Red River tributary in the Texas panhandle (Grinnell 1956:48). Relatives of these dead Bow String soldiers sought revenge, fighting another 1838 battle, and the Cheyennes encamped near Bent's Fort, their medicine arrows temporarily in charge of a woman, the new widow of their former keeper (Grinnell 1956:62).

The Southern Cheyennes almost certainly ranged some distance south of the Arkansas River just as they did north of it near the Bent-St. Vrain trading post. Consequently, archaeologists may discover in the Purgatoire system stone remnants of Cheyenne encampments -- tipi rings. Cheyennes preferred to camp on flats or divides in high places which lent them some advantage if attacked, but required carrying domestic water (Stands in Timber and Liberty 1967:123) from sources lower down for cooking, drinking, and washing. When hunting or war parties were absent and a camp moved, relatives might leave stone directional markers. They piled rocks on each end of the abandoned campsite, and placed two small stones on the side of the pile pointing toward the camp's travel route (Stands in Timber and Liberty 1967:124).

The year after Col. Dodge scouted the Plains, Texas won its independence from Mexico. The Texans undertook to remove all Native Americans from their territory, placing Comanches and Kiowas under strong military pressure on their south and east. In 1837, highly lethal smallpox swept through the Northern Plains tribes except for Dakotas previously vaccinated by United States contract surgeons and Hudson's Bay Company factors. The scourge appears to have struck the Southern Plains peoples in 1839 -- Kiowas, Comanches and Kiowa-Apaches. The mortality seems to have convinced the hostile peoples that they must terminate their intergroup warfare in order to survive Euroamerican aggression. They entered into negotiations which resulted in the peace parley held three miles down the Arkansas River from Bent's Fort in 1840 (Berthrong 1963:83-84). The exchange of presents near the mouth of Purgatoire River has already been described.

Cheyenne population continued its long term decline. Measles swept through the tribe in 1845, as did whooping cough. One chief requested that the United States build a post to protect his people and issue adults a mule and teach them to farm and raise cattle (Berthrong 1963:100-101). The repeated deaths of large numbers of children and teenagers from viral diseases must have significantly sapped Cheyenne morale. By 1847, Indian Agent Thomas Fitzpatrick estimated that the Cheyennes numbered about 2,000, assuming eight persons per lodge (Berthrong

1963:108). Staying at Bent's Fort for several months, Fitzpatrick introduced Cheyennes to a new factor in United States Indian affairs on the Southern Plains, the Indian Agent (Berthrong 1963:107-11). He was a harbinger of the Cheyenne future.

Before the United States reservation policy affected the Cheyennes, however, their numbers declined drastically. Forty-niners on the southern trail to California carried cholera to Bent's Fort. The local water supply became polluted and the disease transmitted to Cheyennes and other Native American customers of the post. One-half of the Cheyennes died (Berthrong 1963:113-14). That implied a drop to only about 1,000 people if Fitzpatrick's population estimate had been accurate. The loss was a devastating psychological blow to William Bent, with his close family and emotional ties to the Cheyenne people, and led to his abandonment and destruction of the 1833 adobe structure.

The 1851 Treaty of Fort Laramie treated the Cheyenne and Arapahoes as allies if not confederated tribes. The agreement designated their lands as those between the Platte and Arkansas Rivers east of the main Rocky Mountains (Berthrong 1963:121). The United States commissioners were no doubt influenced to use the Arkansas River as a boundary because they knew that Mexican individual land grants extended northward to that stream, so they could not conceive that tribal territory actually still extended southward over the Purgatoire River canyon region.

Late in 1853, an artist with John C. Fremont reported 250 Cheyenne lodges at Big Timbers on the Arkansas River. He estimated the population at 1,000 (Berthrong 1963:126). His accuracy depends on whether each lodge by then contained only an average of four individuals. If there were more, Cheyenne women evidently had borne numerous children quickly after the 1849 cholera mortality.

Cheyennes celebrated at new Bent's Fort a victory over the Pawnees, and continued their battles with that tribe (Berthrong 1963:127). An Indian agent in 1854 ransomed Mexican captives the Cheyennes took earlier in the year (Berthrong 1963:129), suggesting at least transitory use of the Purgatoire River zone.

In 1855, an Indian Agent estimated that Cheyennes numbered 3,150, including 900 warriors. Occupying 350 lodges, they owned 17,000 horses and killed 40,000 bison, 3,000 elk, 25,000 deer and 2,000 bear annually (Berthrong 1963:32). They fought only the Utes to the west and Pawnees to the east (Berthrong 1963:142). The Southern Cheyennes insisted to William Bent that they had separated from the Northern Cheyennes, and that only the latter were carrying out depredations on Euroamericans.

The 1858 gold rush to central Colorado initiated large-scale citizen travel along the Smokey Hill River route. This travel effectively divided the Cheyennes into Northern and Southern divisions (Berthrong 1963:143,147). In 1859, William Bent

accepted appointment as Indian Agent. He was able to persuade the Office of Indian Affairs to negotiate another treaty with the Cheyennes and Arapahoes with the goal of guaranteeing them some lands, their 1851 treaty rights obviously availing them little or nothing in the view of thousands of immigrants colonizing the lands between the Platte and Arkansas Rivers.

In 1861, Commissioner A. B. Greenwood visited Bent's Fort to negotiate with the tribesmen. This Fort Wise Treaty gave the United States the Fort Laramie Treaty lands of the Cheyennes and Arapahoes. They received a much smaller reservation bounded by a line between the mouths of Sand Creek and Purgatoire River, up the west bank of the latter to the northern boundary of New Mexico (regardless of the Mexican private land grants), then west to a north-south line intersecting the Arkansas River five miles east of its Huerfano confluence. This north-south line marked the western reservation boundary to upper Sand Creek, which formed the northeastern boundary (Berthrong 1963:150). Reservation restricted life began. The Cheyennes were supposedly confined to the designated reservation, which included a significant portion of the lower Purgatoire River canyon zone. Here in 1864, Cheyenne numbers were sharply reduced by "the massacre of a large number of men, women and children of the Indians of this agency by the troops under the command of Colonel Chivington, of the United States volunteer cavalry of Colorado" (Cooley 1865:24). Surviving Cheyennes continued to range widely for several years, until effectively removed to yet another area reserved in the Indian Territory.

EUROAMERICAN DOMINATION:

THE FARM-MINE-RAILROAD-URBAN-INDUSTRIAL FRONTIERS

A.D. 1870 - Present

By 1870, Colorado Territory contained a reported 39,864 people, not counting Native Americans, incidentally. That was only one-tenth of a percent of the national population (Walker 1872:I:3). Yet, Colorado's Euroamerican population was approximately four times larger than its surviving Native American population. In 1865, the Commissioner of Indian Affairs, D. N. Cooley (1865:23) had reported only 10,000 Native Americans in Colorado. Most were Utes -- 4,500 Tabeguache and 2,500 Grand River and Unitahs -- with only 1,600 Cheyennes and 1,500 Arapahoes. The demography of ethnic settlement had shifted decisively between 1860 and 1870, and the Territory's non-Indian population would triple by the next census, in 1880, with statehood in 1876.

Euroamericans lived widely scattered over the Territory, so that mobile Native Americans could attain local numerical superiority over inhabitants of farms and ranches, but not towns and cities. Arapaho County was the most populous with 6,829

inhabitants; Denver held 4,759 of that total, a gain of only ten persons since 1869 (Larson 1978:17). Gilpin County followed with 5,490 persons; 2,360 in Central City, 1,068 in Black Hawk and 973 in Nevada. Las Animas County was the third most populous with 4,276 inhabitants (Walker 1872:I:16,95).

Las Animas County, in 1870 included Trinidad and the Purgatoire River canyons. Trinidad had 562 residents but settlement was basically rural on farms and ranches. The Purgatoire River Valley east of Trinidad -- the area with which this analysis deals -- had 1,597 residents. The Purgatoire River Valley upstream west of Trinidad held 1,224 people in the Rocky Mountains. The Apishapa Valley had another 893 residents (Walker 1872:I:96).

Purgatoire River farms were small, inasmuch as Las Animas County had but 1,130 acres of improved land in 80 farms, an average 14 acres each. In contrast, Pueblo County had 17,087 improved acres in 120 farms averaging 142 acres, and Boulder County had 14,365 improved acres in 232 farms averaging 70 acres (Walker 1872:III:108,346-47). Only one Las Animas County farm had over 50 acres, 18 had from 20 to 50 acres, 31 contained between 10 and 20 acres, and 30 were only from three to 10 acres (Walker 1872:III:347).

Purgatoire River Hispanic American colonists really were subsistence gardeners who depended on mutton for meat and marketed some raw wool and woven textiles for cash with which to purchase tools, salt, and a few other items. Wartime demand for wool had stimulated expansion of sheep raising. Entire extended families migrated as units into this southern Colorado area (Abbott et al. 1982:41-42). Las Animas County produced only 5,930 bushels of wheat, 2,932 bushels of maize and 980 of oats in 1870. Subsistence crops were, no doubt, significantly underreported. Farmers admitted owning 5,202 sheep, 257 head of cattle, 181 working oxen, 309 milk cows, 29 mules and 70 horses (Walker 1872:III:109). Small as reported livestock numbers were between 1865 and 1870, they indicate that the Purgatoire River Valley ceased being Native American hunting-gathering territory. It became Hispanic American subsistence mixed farming country. The new population gardened with irrigation on the riverine oasis much as Jicarilla Apaches had prior to 1720. It also pastured cattle and sheep, not to mention unenumerated goats, on the oasis vegetation beyond the cultivated fields and on the nearby canyon slopes managed as common lands. An admitted 5,000 plus sheep could not have survived had hostile Native Americans still ranged the Purgatoire River Valley. Still, Hispanic settlements clustered about squares surrounded by homes, sheds, and workshops with a common, blank outer wall (Abbott et al. 1982:43). Land use patterns as well as resident population had decisively changed and intensified.

Most Colorado counties in 1870 contained a significant percentage of foreign-born immigrants. Arapaho County, including Denver, had 33 percent foreign-born residents. In contrast, the

southern counties had been colonized mostly by native-born New Mexicans. Las Animas county contained a mere three percent foreign-born residents (Walker 1872:I:305). Yet, territorial society was ethnically stratified with most foreign-born persons classified above Hispanic Americans. Anglo-Americans often dealt only with a Hispanic village's patron -- either an extended family's patriarch or a large land owner and employer (Abbott et al. 1982:45). At the bottom of the social hierarchy were any Native American "captives," which is to say slaves, held by Hispanic families. Apparently these were not as numerous in Las Animas County as in the San Luis Valley (Head 1865:180).

English speaking Coloradans were better educated than Hispanic colonists. In urban Arapahoe County, 780 persons had attended school, or 11.4 percent of the population. In Las Animas County, only nine-tenths of one percent had attended school.

There was, moreover, a unique educational situation in Las Animas County. No less than 37 of the 39 native-born individuals living there who had attended school were Indians, even though the census reported their sex (15 male and 25 female) under a "white" column. Were these members of the Bent families who had been educated at St. Louis?

The illiteracy figures were, of course, the opposite of the schooled proportion of the population. In Arapaho County, a mere 1.4 percent of the residents admitted not being able to read or write. In Las Animas County 47.7 percent could not (Walker 1872:I:16,403). Colorado colonists were doing something about education, operating 142 schools of all types (Walker 1872:I:461). Its towns were taking on other urban characteristics. There were 14 newspapers (Walker 1872:I:482), and 55 organized religious congregations with 47 churches able to seat 17,495 persons (Walker 1872:I:506).

In a dozen years, the hide hunting and processing, horse and mule raising and trading occupation Native Americans pursued had become outmoded. Colorado in 1870 had 30,349 persons ten years of age and older (not counting Native Americans) of whom 17,583 reported occupations, 17,147 of them being male (Walker 1872:I:670). Nearly all women were considered housewives. Despite the stereotype of Colorado as a mining frontier, 6,462 men farmed compared to 4,681 men and women engaged in mining and manufacturing, followed by 3,625 providing professional and personal services and 2,815 engaged in trade and transportation (Walker 1872:I:671).

Just as most of the traders working at and out from the Bent-St. Vrain trading post had been employees, most 1870 residents of Colorado worked for someone. To be sure, 3,224 "farmers and planters" constituted the largest single occupational group, but they employed 2,659 laborers. The census did not distinguish employers from employees among 2,200 miners, but the latter certainly predominated. Another 1,931 laborers

rendered personal services as did 357 domestic servants. Railroad companies employed 962 men. The 186 stock raiders employed 356 herders. Store clerks and salesmen numbered 263. Employers and employees were not distinguished in census reports about hotel, restaurant, livery-stable personnel or teamsters. In any event, over 50 percent of the individuals with reported occupations in 1870 were employees (Walker 1872:I:223), and the true proportion was higher.

Enumerators classified Coloradans in 65 occupations and the actual number of specialties was considerably higher. Industrial society had become firmly established. At least 18 of the 1870 occupations involved exploitation of natural resources, using as many specialized techniques. The Native American hide hunter and processor and horse and mule raisers and traders were no longer economically competitive. Like the Indian trading post, they had been reduced from commercial and social dominance to a peripheral social and economic role. One index of change was the proliferation of specialized construction occupations -- six brickyards employing 63 men (Walker 1872:III:419) and 33 sawmills employing 299 men (Walker 1872:III:452) compared to only four gunsmithies employing but six hands (Walker 1872:III:441). Ten breweries employing 17 men (Walker 1872:III:451) signaled the change from whisky to working man's beer. Two railroads reached Denver in 1870 (Abbott et al. 1982:84), ushering in the full industrial age.

Las Animas County did not proportionately share in this industrialization. It had only 12 industrial establishments employing 17 persons. Two of those were waterwheel driven flouring mills with four employees (Walker 1872:III:499,641). Nonetheless, Hispanic American shepherds had definitively colonized the Purgatoire River oases and their sheep and goats grazed adjacent slopes, accelerating erosion. Native American hunters were gone; the Indian trading post era ended. The Purgatoire River area became an historical bywater instead of a cockpit. The later history of this bywater lies beyond the scope of the present discussion.

TWENTY CONCISE CONCLUSIONS OF THE ETHNOHISTORICAL ANALYSIS

1. The Sixteenth Century population of the study area can only be hypothesized from documentary sources, not accurately defined or characterized.

2. Acquisitions of horses and lances enabled Southern Athapascans to achieve military superiority over their unmounted neighbors who lacked firearms. Southern Athapascans expanded over the Southern Plains, leading to an "Apache Century" of regional military dominance and economic affluence between approximately 1620 and 1720. During that Apache Century, Jicarilla Apaches occupied the study area, which lay near their Sangre de Cristo mountain core territory.

3. The Arkansas River is the northern sacred stream in Jicarilla Apache cosmology. It was placed at the Northern cosmological frontier by the Creator. It is not only the main stream which is sacred to the Jicarilla Apaches, but the whole hydraulic system, including the Purgatoire River tributary. Both historical and anthropological research concerned with Jicarilla Apache culture has shown it to constitute a persistent cultural system as defined by Spicer (1971). The Purgatoire River falls, therefore, well within the American Indian Religious Freedom Act guarantee of Native American access to religious shrines. That the United States and its homesteaders and agencies have for a considerable time denied Jicarilla Apaches access to their Arkansas River system holy waters has no more terminated their holiness to Jicarilla believers than centuries long Turkish Muslim denial of Christian pilgrim access to Jordan River waters in Palestine terminated their holiness to Christians. The American Indian Religious Freedom Act also protects the right of Jicarilla Apache traditional Religious officiants to collect sacred substances (such as cattail pollen) from water plants growing in and along the banks of the Purgatoire River and other components of the Arkansas River system.

4. During the early years of the Eighteenth Century, French traders venturing up the west bank tributaries of the Mississippi River carried guns and munitions to peoples living on the Northern Plains, and along the lower reaches of the streams. Firearms gave these native groups military superiority over lance-wielding Southern Athapascans. Consequently, the period between about 1720 and 1820 became the "Comanche Century" on the Southern Plains. Southern Athapascans migrated southward to the Spanish colonial frontier, or in the Jicarilla instance, within the New Mexican Province. Jicarillas continued to hunt and collect plant foods in or near the study area, but that zone became part of the Comancheria shared with the allied Kiowa, and to some extent by the Kiowa-Apache.

5. While Jicarillas gardened along the Purgatoire River, they welcomed Navajo hunting parties going to and from the Plains for bison. Comanche, Kiowa, and Kiowa-Apache domination of the Southern Plains appears to have terminated such Navajo expeditions.

6. During the "Apache Century," Jicarilla gardening along the Purgatoire River meant that the study area constituted part of the Circum-Puebloan culture area. When the study became part of the Comancheria, horticulture disappeared and the zone constituted part of the post-horse Plains culture area. The ethnic migrations in this region illustrate very well that culture area boundaries historically were far from fixed, but shifted across space through time.

7. Mexico gained its political independence from Spain in 1821. The newly independent nation opened its frontiers to foreign traders, reversing Spain's colonial mercantilistic,

protectionist policies. United States merchants from Missouri promptly initiated "the Santa Fe trade" to and beyond the provincial capital city of Santa Fe. Mexicans already traded with Jicarillas, Comanches, Utes, Kiowas, and Kiowa-Apaches at fairs held at the Gateway Pueblos, Pecos, Picuris, and Taos, and at the Genizaro settlement called Abiquiu on the Chama River. The influx of economical manufactured commodities via the Santa Fe trade augmented the volume of the trade fairs at pueblos. It also fostered increasingly frequent New Mexican trading expeditions to the Plains to acquire Comanche horses and hides and skins and meat, the traders becoming known as "Comancheros."

8. United States merchants quickly followed the transient Santa Fe trade with Indian trading posts. The most important trading company near the study area was apparently built in 1833 by Ceran St. Vrain and the Bent brothers. William Bent married a Cheyenne woman, insuring that southward-migrating Cheyennes would be dependable customers at the post. All of the Native American tribes living in the region traded at Bent's Fort, having become already significantly dependent upon manufactured commodities, and integrated into the world market economy, particularly through trade in horses and mules in constant demand in the United States.

9. The Southeastern Ute Indians constituted an ethnic constant in the region near the study area. They dominated San Luis Valley immediately west of the Rocky Mountain front range, and crossed mountain passes to the upper Arkansas River area and the Plains throughout historic times. They hunted bison and other big game animals; they collected plant foods; and they raided or visited with other ethnic groups residing in the study area and near it. Thus, Southeastern Utes also entered into the horse-mule trading world market economy at the Gateway Trading Pueblos, and to some extent at Bent's Fort.

10. When Southern Athapascans acquired horses from Spaniards, they became targets for horse thieves living farther north. The latter included the Pawnee from the earliest post-horse Plains period. Pawnee raiding parties continued venturing into the Upper Arkansas River area until nearly the end of intergroup conflict on the Plains. Consequently, Pawnees were one of the ethnic groups occasionally utilizing the study area, although their passage was typically unobtrusive, and their impact small.

11. The same horse magnet also attracted Arapahoes and Cheyennes not merely to raid southward, but to migrate southward. The Cheyennes carried on trade with French peripatetic traders from the late Eighteenth Century, yet they were to some extent pushed southward by militarily superior Dakotas armed with guns and well-mounted on warhorses. Moreover, the Mexican traders who began early in the Nineteenth Century holding trade fairs at the mouth of the Purgatoire River, helped attract both tribes southward to and almost certainly across the Arkansas River.

12. By the time the St. Vrain-Bent company established the Bent Fort trading post, therefore, it had a populous multi-ethnic group clientele. The horse (and mule) constituted the most valuable commodity traded by all ethnic groups dealing with the Bent's Fort traders, either there or in the various expansion posts or by mounted or cart trading expeditions. Bison hides and peltries were significant trade items for the Native American professional hunters during the trading post era, but livestock furnished prime profits to all participants in the market.

13. Anglo-American colonization near the study area began with the Indian trading post period. New Mexican provincial authorities accelerated colonization by making land grants on the Arkansas River frontier during 1840s. The initial Arkansas River tributary colonies were combined cattle ranch-gardening economic units and were only marginally successful.

14. The United States annexed New Mexico at the beginning of the Mexican War, formally by the 1848 Treaty of Guadalupe Hidalgo. The treaty guarantees property rights and freedom of conscience to all religious communities within the annexed Mexican Cession. Annexation accelerated Anglo-American immigration into the region, but converted the Purgatoire River from something of a center of change into a by-passed zone.

15. The Kiowas, exercising their right to freedom of religion guaranteed by the Treaty of Guadalupe Hidalgo, held their 1856 Sun Dance in or near the study area. That ceremonial behavior symbolized Kiowa perception of the sacred character of the Purgatoire River zone, including the cedar (juniper) thickets from which participants took cleansing boughs, firewood, and probably the poles to build the Sun Dance corral around the central pole. The forced removal of Kiowas from this area and passage of time have not terminated its religious significance to religious traditionalists. The situation parallels that of Jerusalem. Forcible removal of Islamic temporal officials and the passage of time certainly have not terminated the city's religious significance to Moslems.

16. Native American economic dependency on Indian trading posts increased between 1848 and the War of the Rebellion. The trading post era began a precipitous decline with the rapid Anglo-American colonization of Colorado when gold was discovered there in 1858. New settlers very soon outnumbered surviving Native American professional hunters and horse-mule traders and their families.

17. Wartime state militia massacred Native Americans to a significant extent. Surviving Indians readily assented to post-war forced migration to distant Indian Territory reservations, or in the Jicarilla and Ute cases, managed to survive until presidential executive orders reserved western lands. Native Americans were effectively removed from the study area and adjacent region during the 1865-1875 period.

18. Wartime wool demand stimulated Spanish-American migration northward from New Mexico into the upper Arkansas River tributaries, including Purgatoire River Valley. Spanish-Americans settled sheep ranches with relatively small subsistence gardens irrigated with river waters.

19. During the post-war half decade, Colorado defined its basic political and administrative institutions and units. It established Las Animas County in Southeastern Colorado, and another largely Spanish-American county. Better educated Anglo-Americans and European immigrants in Colorado looked down on less-educated Spanish-American shepherds and subsistence gardeners in these little industrialized counties.

20. Las Animas, which originated as a Bent and family ranch-farm at the Purgatoire River mouth, emerged as the principal town at one end of the stream near the study area. Trinidad, which originated as a wagon road station on the Denver-Santa Fe route, emerged as the principal town on the middle Purgatoire River.

CHAPTER IV: ABORIGINAL ORAL HISTORY AND ARCHIVAL QUESTIONS

"Then, hardly you don't see them kinda people go in there..." (Thunder Cloud Interview)

This portion of the report presents and analyzes data collected by Powers Elevation during the conduct of the History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area project. In the course of this study, Mr. Richard Carrillo, Powers Elevation historian and researcher, conducted tape recorded interviews with sixteen local informants. Mr. Carrillo's interviews were structured to include the six Aboriginal Oral History and Archival Questions as specified on page twelve of the Scope-of-Work section of RFP 1200-83-06. These questions were as follows:

1. Do you, or anyone of your acquaintances, know of any Indians having been in the area?
2. Where? (physical location, as exact as possible).
3. When? (as precise as possible).
4. Who? (Name of tribe or band and/or "chief's" name).
5. Do you know why they were here? (trade, food, etc.)
6. Where did they come from and where were they going?

The names of potential informants for local history were provided to Powers Elevation from an informal list compiled by Mike Halla, formerly the environmental officer at Fort Carson. This list was augmented by names of other possible local informants who were recommended to Powers Elevation by other informants. In all then, sixteen useable interviews were produced. Nine of the sixteen people who were interviewed had lived and owned land in the Fort Carson Pinon Canyon Project Area. The other seven informants had lived near or were knowledgeable about the area. Despite the fact that some of these people had lived in the area for over seventy years, fifteen informants had no firsthand knowledge of any Indians having been in the area, although several reported having seen Indian artifacts and other signs of Indian presence there. Nine of the fifteen people had some secondhand knowledge of Indians in the

study area. Their comments are summarized at the end of this chapter.

Only one informant, Mr. Thunder Cloud, an elderly man of Cherokee and Navajo parentage, knew of the presence of Indians in the Fort Carson Pinon Canyon Maneuver area. Mr. Thunder Cloud has lived in the area since 1928. One of the most important pieces of information supplied by Mr. Thunder Cloud was that during the Great Depression a community of Indians lived just south of the Pinon Canyon area at a place called Alfalfa. Excerpts from Mr. Thunder Cloud's interview follow: (In order to conserve space in the transcript, Richard Carrillo will be referred to as R.C., Thunder Cloud as T.C.).

R.C.- This interview is being conducted with Mr. Thunder Cloud. The date today is February the 16th, 1984. My name is Richard Carrillo. This is interview No. 15, and the interview is being conducted at Mr. Thunder Cloud's house just outside of Model, Colorado. Well, as I was saying, Mr. Thunder Cloud, the first set of questions basically has to do with the history of the area. So, you've indicated earlier that your background is Cherokee --

T.C.- Yes.

R.C.- and Navajo. Your mother was Navajo?

T.C.- Yes. (Powers Elevation Interview: Tape #15, Side 1; Time 001-012.)

THE COMMUNITY OF ALFALFA

R.C.- Mr. Thunder Cloud came into the area in 1928 and lived at the community of Alfalfa. So, I'm going to start asking, Mr. Thunder Cloud, questions about Indians, any stories, storiettes that you've heard, of people being in the area. Indians, you know, before you all came. Do you, or anybody you know, like your mother or your father or anybody else, know of any Indians that were in the area here?

T.C.- Yes.

R.C.- By what time would this have been, sir?

T.C.- 1929 to 1948.

R.C.- And where would they have been located?

T.C.- In that same area we've been in.

R.C.- Do you have any idea as far as what tribe or band they would be in?, any chiefs or anybody like that?

T.C.- No, the ones I knew mostly belonged to the Arapaho and the Cheyenne.

R.C.- For what reason was it that they were in the area, sir?

T.C.- Well, they came in the same principal reason, I mean that it was hard times, like I said. The Big Depressions that -a- when the rich people, you know, bought their lands and chased them out of there. And all the customs they had between 'em and, you know, the blood they had and they couldn't get along with the rich people. And they made them suffer a lot...but -a- time went on now, that hard times. 'Course them days were a lot harder for them people, than this depression.

R.C.- O.K. So they moved into the area to what? To work on farms and...?

T.C.- Yeah. Raise their own...

R.C.- So were they homesteading, sir, or...?

T.C.- Yes.

R.C.- They were homesteading?

T.C.- Yes, on the south side.

R.C.- O.K. South side of the Purgatoire? Or...?

T.C.- Yes. South side of the river -- by the Luna Canyon.

R.C.- By the Luna Canyon?

T.C.- Yes. There's where the Alfalfa is.

R.C.- Was the community -- mainly of Indians?

T.C.- Yes.

R.C.- Were there many other Cherokees or...?

T.C.- No. They were all mixed.

R.C.- Just different groups?

T.C.- Yes.

R.C.- And you said Arapahos and Cheyennes, too.

T.C.- Yes.

R.C.- Would they all have come from Oklahoma? Or...?

T.C.- No, they came from different parts.

R.C.- Different parts of the country?

T.C.- Yes.

R.C.- O.K. Well, that's where the groups were coming from. Where were they going?

T.C.- Yes. Of course, now they're on the reservation now.

R.C.- Right. What happened to all these people?

T.C.- Well, lot of people, you know, that were buried here. In them days, you understand, you take like Sittin' Bull... Well, you take the -- Kicking Bear and all them people. There were hard times on them, you know. They had to let the people go -- wherever they could survive. See, there was no way they could make a living 'cause there was no government was helping them, you know, to look for their own income. (Powers Elevation Interview: Tape #15, Side 1; Time 000-046.)

AN INDIAN COMMUNITY OLDER THAN ALFALFA

Mr. Thunder Cloud remembered hearing about another earlier Indian community long since abandoned which he referred to as "the oldest town here". Mr. Thunder Cloud described it to Mr. Carrillo:

T.C.- The oldest town here is -a- 36 miles from here on this road going east, and then from there 'bout nine miles and then you take a dirt road. Well, that there is the town on the top of that hill, which is the oldest town there is, but I can't recall the name of it.

R.C.- ...On this side of the bridge?

T.C.- Yeah, you go through this road right here, which now is closed for the public.

R.C.- That goes to Mr. Cucharas' house, right?

T.C.- Yeah, the other side -- I don't remember how many miles from Cucharas' place, you can see the town... There's no more buildings in there, you know. That

other thing is modern.

R.C.- Was it down in the...?

T.C.- It's on the flats, before you go down there -- the river...

R.C.- On this side of the river?

T.C.- Yes.

R.C.- There was a town there?

T.C.- Yes.

R.C.- Who lived there?

T.C.- I don't know. That was on the late, according to the little bit I know, that was the 18s, and which we were not born yet.

R.C.- The people that lived there, were they Mexicans or Spanish or...?

T.C.- Well, mostly the Indian people in there.

R.C.- Oh, Indian.

T.C.- I never did call what that was, you know.

R.C.- So, both of these were Indian, then?

T.C.- Right. All this area...

R.C.- was Indian.

T.C.- Yes.

R.C.- And these are the people that came in later, right? I mean, they weren't the original Indians?

T.C.- No. They just come in to here just, you know, to live in and just keep on going. That's before they put them on the reservation.

R.C.- What kind of buildings would you find over there? Were they rock buildings?

T.C.- Yeah. Just mostly rock buildings.

R.C.- 'Dobe there -- rock 'dobe?

T.C.- You can only see the foundations.

R.C.- But they're still out there, though?

T.C.- Yes. (Powers Elevation Interview: Tape #15, Side 1; Time 330-355)

R.C.- Maybe sometime, if I'm here this summer, would you mind taking me over there and show me where those places were?

T.C.- Yes. I'd be glad to.

R. C. That would be good. Because I never heard of those places and I'm sure nobody knows about them, do they? Would you say these were Indian buildings?

T.C.- Yes.

R.C.- I mean, Indians lived there.

T.C.- Yes. Well, they were all mixed some in, but you know -- anywhere around here, you see, it's for the people.

R.C.- Yes. But they were earlier? I mean, a lot of those were earlier people.

T.C.- And there's still some there in the Apishapa. (Powers Elevation Interview: Tape #15, Side 1; Time 378-385)

THUNDER CLOUD'S LIFE IN ALFALFA

During the interview, Mr. Carrillo asked Mr. Thunder Cloud about his life in the Fort Carson Pinon Canyon area since the family's arrival in 1928.

R.C.- So, when did you or your family move into the area here?

T.C.- 1928.

R.C.- When you first moved into the area, where did you live?

T.C.- We were on the Vijorlas Creek.

R.C.- How long did you live there, sir?

T.C.- Well, I was at the age of seven. That was when my father was departed from us.

R.C.- And then after that where else did you live? Did you live in any other place?

T.C.- Yes. When we left the Vijorlas Creek we landed into Alfalfa.

R.C.- In Alfalfa. And there were already people living there?

T.C.- Yes. There's still the homes of the Indian people still standing from that time.

R.C.- And the canyon is Luna Canyon?

T.C.- Yes. It's nearby. It's not very far away -- about, probably, seven miles from there -- from Alfalfa.

R.C.- What was the reason that you or your family selected that location?

T.C.- Well, by the hard times... Depressions, you know, you have to get away from... Where you can hunt mostly for feed. Like I said once, you didn't have no flour in them days and, you know, you had to live with yellow corn meal and whatever -- jack rabbit you can find.

R.C.- Did you raise gardens there or try to raise pork and...?

T.C.- When we have a little bit of rain, yes.

R.C.- Did your father or mother acquire it as a homestead?

T.C.- Yes.

R.C.- It was acquired as a homestead?

T.C.- Yeah, but they didn't belong to him, no. But, you know, they'd build a mud house that's just like the one we're on now. In them days, you know, whenever you could find a bit of land, it was your home.

R.C.- But you didn't have to put in a legal claim for it?

T.C.- No.

R.C.- You just build a house there?

T.C.- Yeah.

R.C.- O.K. And so, who did you get the land from? Or did you just...?

T.C.- We went wild, that's all I know. (Powers Elevation Interview: Tape #15, Side 1; Time 046-098.)

R.C.- And, again, what attracted you all to the area?

T.C.- Well, we was surviving for food.

R.C.- When did you leave there, sir? Why did you leave there and when?

T.C.- Well, because like the people's taking the land like they do now. See, they forced the people out of there.

R.C.- Oh, they just forced it. So did you all get forced out of there?

T.C.- Yeah.

R.C.- About what time? When was this, sir?

T.C.- It must have been 1942, it seemed about.

R.C.- And again, why was that? Who owned the land?

T.C.- Well, you see, the big millionaires like --a-- there was R-Bar or Ortega. I don't think there was two companies in there -- towards the last.

R.C.- And so, they just told you all to leave.

T.C.- Yeah. You see, that land now is occupied by the company -- cattle company.

R.C.- Do you know what that company is, sir?

T.C.- Right now it belongs to the River Canyon Company. (Powers Elevation Interview: Tape #15, Side 1; Time 103-117.)

R.C.- And what about your neighbors? What kind of people were they? Were they similar to you?

T.C.- Well, they were all mixed.

R.C.- But you said there were other Indian groups, too.

T.C.- Yes.

R.C.- And, I think you mentioned earlier, Arapaho and...

T.C.- And the Cheyenne. Of course, right now, the Chase and the McElroys who were all part of them went

to Wyoming, some of them in South Dakota. Some of them, you know...

R.C.- Did they all leave on their own?

T.C.- Well, some of them left on their own and some of them, you know, that were forced out.

R.C.- Forced out. They just went up there?

T.C.- Yeah. (Power Elevation Interview: Tape #15, Side 2; Time 008-018.)

WAGE LABOR

R.C.- What did you do for a living?

T.C.- I worked in general farming.

R.C.- Did you have your own property, sir?

T.C.- Yes, the one we sold on the south side. The one that's locked up now.

R.C.- What was your property used for? Like ranching or what?

T.C.- Just for living.

R.C.- General farming on it or anything like that?

T.C.- No... That was the one I was telling you was private with a big R on it. I don't think anybody goes there.

R.C.- So would you consider it to be a farm or ranch or...?

T.C.- There was only about an acre and a half, I think it is. And we used it all because the ranch is just across the river. It's not even three quarters of a mile...

R.C.- Oh, where you worked? But you used to work...?

T.C.- Yeah. We worked for Albert across the river.

R.C.- Who did you work for, sir?

T.C.- Well, we were employed by a lot of farmers in there. But mostly now, I mean when I stopped working, it was Albert Blackley. Yes. That's the one we were... He stopped grain for farming, you know what I

mean? And we, having a lot of experience in irrigation, we gave him a hand when he needed it. But then the law, I mean -- this time where we all are dropping out of there now and having ours here. Like I told you, we don't agree what they're gonna do this year.

R.C.- What's that, sir?

T.C.- Them wages and... 'Cause here we cannot move a truck, you know, for that kind of wages and pay the gas, pay the cost of truck and everything. And why others can have everything free and we ain't getting it. (Powers Elevation Interview: Tape #15, Side 1; Time 233-264.)

TRADING STRATEGIES

During the period of hard times in the late 1920s until the 1940s, the Indians who lived there at the time worked mostly as farm laborers and often supplemented their income by making many of their household necessities and by bartering garden produce and animals they raised for things they were not able to make, according to Mr. Thunder Cloud:

T.C.- There's a lot of people, you know, that got quite a bit of land, you know, where they plant and stuff like that... Cause they believe in living, if you know what I mean, living by the wilderness of the people.

R.C.- And what about animals? Did you have any animals that you raised?

T.C.- Yeah. We had a few cattle, you know. Sometimes they gave us a little bit of land where we plant our own, but that was ours.

R.C.- Did you have sheep and things like that?

T.C.- Yeah, we had a few... I think my mother used to run 'bout 300 goats... That's what they made their living out of -- milk, cheese, and little goats. That was that.

R.C.- When you were little and let's say, your mother... Did you buy a lot of stuff from stores? Or did you all pretty much produce your own stuff? Make everything? Did you buy your dishes and all that stuff?

T.C.- No, we made our own.

R.C.- You didn't have to go out and buy anything? What

about coffee and all that stuff?

T.C.- Well, coffee was the one thing that I don't know where they bought it from or how they made it. They made it somewhere. Out of their own home.

R.C.- They made their own, though.

T.C.- Yeah. They didn't come in cans. They came in a five pound bag.

R.C.- But did you all deal with money as such? Or was it trading? Or was it...?

T.C.- Well, mostly what we did, we'd carry garden like we done now. Say if you got something, like a stove or something big we needed very bad, or if they got something they want to trade, we trade for it.

R.C.- Rather than dealing with cash. So if somebody wanted to buy some, let's say, some goats from your mother for milk, you would trade for...?

T.C.- flour or beef or something like that.

R.C.- And, of course, like you said, your father had demised.

T.C.- Yeah.

R.C.- But would that have been about all you would have dealt with as far as any American things -- that people would want after they get staples?

T.C.- Yeah. (Powers Elevation Interview: Tape #15, Side 1; Time 422-462.)

PLANTS AND CRAFTS

R.C.- You all made your own things then? Did the people have guns then?

T.C.- Yes, they had the guns.

R.C.- Did people use bows or anything like that?

T.C.- Yes. Some of them did.

R.C.- What about the tips...?

T.C.- You mean the arrow heads? They used them quite a bit.

R.C.- Did they make those from the rock?

T.C.- Yeah. From the flint rock.

R.C.- So some people were still making them. They would use this for hunting then?

T.C.- Yes. And defense.

R.C.- Would this have been about the time that you were growing up?

T.C.- Yes. Around the '28 or '30 mark.

R.C.- So, when you were living out with your mother, what kinds of things did you produce for your own personal use on the farm in there -- or in any place?

T.C.- Well, mostly the food, that was popular in there, was white corn. Well, we call it, in our language, "maize kornchu", that's to make hominy. and whatever stuff like that. Like -- sinebago (?) was another, of those foods that's still going strong.

R.C.- Did you grow those yourselves?

T.C.- Yes. And there was another one which they were produced mostly by the Indians, day to day stuff, they called "sauka"...it's like a cane, you know what I mean? There's a leaf on the top and...

R.C.- And they grew that themselves. Is that still grown around here?

T.C.- No, I haven't seen that for quite a while now.

R.C.- What about that maize kornchu? You used that for food?

T.C.- They could make corn tortillas out of that, too. And also they made it for soup and...

R.C.- What about grinding the flour? How did they make the flour?

T.C.- Well they use their own... There's one they call it the mee-ka. The mee-ka is a hand grinder.

R.C.- Like a mano or metate?

T.C.- No. It's a kind of thing, oh, larger than that seat there. And they had a crank here. And then other people flip that crank.

R.C.- Like a mill -- from rock...? From stone?

T.C.- Yes.

R.C.- Did a lot of people have those or did one person have 'em and people take them to them to grind 'em or...?

T.C.- No, there was a lot of people, if they know how to make it, they share in families, you know. They'd pass it on to one family and...

R.C.- Did people make those themselves?

T.C.- Yes. Out of old parts, you know. Like when the first plows come in here, there was pieces of iron they build and...

R.C.- Did a lot of people, here in your time, were they using a lot of wooden things?

T.C.- Yes.

R.C.- Making their own wooden things and stuff like that? And not buying iron. Was there a lot of ironware out?

T.C.-Yes. All these iron and stuff like that... Well, the tool iron, sure. They was here when we got here. In fact, we got scared, you know, around the forge when they started making these cheap materials, you know what I mean? (Powers Elevation Interview: Tape #15, Side 1; Time 422-530.)

T.C.- An awful lot in them days they used to take the wheat to be ground out there in Marty's Mill. Of, course, Marty don't do that no more, I don't think, but they used to take them wagons and them were full of wheat and they used to grind it for the people. And they'd brought the flour back. And then, of course, there were a lot of other things that used to be there. Things, you know, that can't be made on a farm for severe winters. And, sometimes people got wise enough to make 'em and they survived themselves.(Powers Elevation Interview: Tape #15, Side 1: Time 599-612.)

R.C.- What do you consider to be an important event when you were in the area that you can remember --. That it still stays with you?

T.C.- That's craft work.

R.C.- Pardon me?

T.C.- We used to make the things lives here. Things like that. You know, we go mostly for the rock. See,

that's where you make your -- learn to make your facilities, in other words. Like the things... We got some here -- right here at the present moment (He unwraps something). See, we used to make this for our laundry. This is the best soap anybody ever made. See? this takes all of the things out of the clothes. This made out of -a- animal fats, they call it. See, that's the best soap that ever was made. It doesn't matter what kind of a stuff is on your clothes. It's better than the one we got now.

R.C.- And you make this? Do you still make it yourself, sir?

T.C.- Sometimes, yes.

R.C.- How do you make that? What do you put in that?

T.C.- Well, it's only lard and lye.

R.C.- And that's all?

T.C.- Yes.

R.C.- You have to boil that and...

T.C.- Yeah. Mostly the people, you know, around this country, goes for, you know, wild food -- you know what I mean? Like -a- deer and they make their own jams and stuff like that.

R.C.- Do people still do that now?

T.C.- Yes, there's a part of the people on the south side of Hoehne do that. You know, they dry spinach, raw spinach and all this.

R.C.- They go out and collect all that.?

T.C.- And they dry a lot of chile, you know, and that's for -a- the hard winters. See, with the dried meal on tops, you know, with chile and mix it up and the thing is dry and...

R.C.- Do people still do that now?

T.C.- Yes, part of the old people that live -- still do that. (Powers Elevation Interview: Tape #15, Side 1; Time 117-150.)

R.C.- Do people still make their own things?

T.C.- Yeah. Like we got in there. It takes a little to know 'em, you know, but they last more than what junk they bring in from Japan, know what I mean?

(Powers Elevation Interview: Tape #15, Side 1; Time 175-178.)

WILD PLANTS

R.C.- Did you use a lot of wild fruit? Did you go out and pick...?

T.C.- Yes.

R.C.- Did you always go find this and...?

T.C.- And plums and chokecherries and you know, stuff like raw spinach and stuff, I mean, like that...

R.C.- You say people still do that now?

T.C.- Yes. The ones that understood it. Because, you know, the modern guys nowadays go for... Stuff that's not worth a damn anymore.

R.C.- That's probably why the people are still so healthy. They're still alive. You know, they've eaten a lot of just natural stuff.

T.C.- Yes.

R.C.- What about what your fathers did? Do people around eat the cactus?

T.C.- There's a few, but not very many now 'cause, you know, the area's spreading. I mean, being nothing to cook out. It being like Hoehne, see. They got lot of spinach but they're using a spray to kill the food. See what I mean?

R.C.- Oh, they spray 'em.

T.C.- Yes.

R.C.- Oh, do they grow spinach there?

T.C.- No, it's wild.

R.C.- Oh, it's wild. The wild spinach, O.K. (Powers Elevation Interview: Tape #15, Side 1; Time 533-551.)

T.C.- And, you know, they had more rain than what they got now. But there was no spraying like now, know what I mean? Peoples used to go out and -- like these grass seeds right here or anywheres up the hill. They used to raise more than what they got now during rainy weather. See, the big snows in the winter had enough

moisture there to go for 90 days, maybe more...

R.C.- Do you think the weather was different?

T.C.- Yes, it is. Why I can say the weather is different now is you take... Oh, what the heck do you call them -- the wells. Like the one they got here. Well, see, the ground gives -- every so much the turn of the century. Now, see, now this water here is turning more in alkali than the... This used to be a pure water. (Powers Elevation Interview: Tape #15, Side 2; Time 062-072.)

EARLY SETTLERS

Mr. Thunder Cloud told Mr. Carrillo about some of the older people who were living in or near Alfalfa when he was a youth and some of the people who live in the region now:

R.C.- Who were some of the earliest settlers in the region, there, sir? Do you remember?

T.C.- Well...as far as I know, the oldest one what I know there was Butlers -- one of them -- and then, old man Shaw. He used to own all the land clear to Branson. And there was another one. If I'm right, I think that was the Benevitas. And I think they was raised there, too.

R.C.- And they were there before, though?

T.C.- Yes. Then there's a lot of more old people, I mean, that I cannot recall because I was too young. (Powers Elevation Interview: Tape #15, Side 1; Time 98-103.)

Mr. Thunder Cloud named some of the elderly people who still live in the area. He went on talk about some of the reasons it is difficult to communicate with these people.

R.C.- Who are some of the people that live down there, sir? I'm not real familiar with Hoehne.

T.C.- Well, there's still lot of old people, I mean, timers like the Cordovas.

R.C.- Are they the relations to the Cordovas that run Cordova and...?

T.C.- Yes.

R.C.- They're their relatives there?

T.C.- Yes. And there's the Trujillos, that's the oldest one we got. And then my brother, Lee Martinez, that's another one. Been in the area for about 70, probably 80 years. Never moved from the same area.

R.C.- It might be good to go and talk to him and see if they still do a lot of that stuff there.

T.C.- Yes. Of course, everything's under lock. I mean, it's pretty hard to get 'em. You know, they've got the base locked.

R.C.- Oh, I see. So you pretty much have to know somebody to go...?

T.C.- Yes, 'cause they're the only ones that got the key.

R.C.- Um hm. That's so people don't wander in and out of there.

T.C.- No, that's what do you call the, I can say it in Indian, but I cannot say it in English, the name of what the reason them people are there. And that's why nobody disturbs them kind of people. See, they got them -- whatcha-call-it -- Tamayama homes. The Tamayama Homes, where they live, they're 'bout 130 - probably 140 years old.

R.C.- What kind of homes are those, sir?

T.C.- Them white 'dobs, like this.

R.C.- This is an adobe...?

T.C.- Yes. And, you see, on a severe winter, they got a better chance to survive, you know, than a -- lumber house. Then, hardly you don't see them kinda people go in there. You see, their things they got because you know, they work hard to save 'em and they've got a lot of things in there they don't want anybody to know about. Like the graveyard. And their own burial ground. You know, stuff like that.

R.C.- Are these people - Spanish? Or Mexican? Or Indian -- or what?

T.C.- They're Indian -- mixed. (Powers Elevation Interview: Tape #15, Side 1; Time 140-168.)

SUMMARY OF INTERVIEWS BY POWERS ELEVATION

In examining the answers to the questions, the following patterns came to light. Several people commented that while there were no Indians in the area while they lived there, they had seen signs of Indian camps, such as arrowheads and rock art. Six of the informants indicated they had heard stories about Indians from friends and relatives. Four of these stories are similar, in that they discuss the fact that when the Indians were pushed on to reservations, some "renegade" Indians would return to the Purgatoire River area and kill stock belonging to local ranchers. Two of these stories (one from Martin Salas and the other from Mrs. Tom Russell) appear to be the description of the same incident, since they both took place at Higbee near the Richard's homestead in the 1880s.

When talking about the time period for this Indian activity, there were few clear dates given. Two informants guessed that Indians were in the project area during the 1830s. Two informants mentioned the 1860s. Two informants talked about incidents in the area in the 1870s. Mr. Salas and Mrs. Russell agreed that the Indian raid on Higbee occurred in the 1880s. Mr. Thunder Cloud was specific about the time of occupation of the town of Alfalfa, dating it from 1929 to 1943.

A number of different locations were mentioned during the discussion of where the Indian were seen. This included Lockwood Arroyo (near the stage coach station), Van Bremer Arroyo (where the old stage coach road crossed it), Rock Crossing, near the old Sheehorn homestead, at Higbee, on the benches along the north bank of the Purgatoire near the Rourke ranch, at Nine Mile Bottom, at Iron Springs and at the town of Alfalfa.

The tribes mentioned include the Utes, Comanches, Kiowas, Arapahoes, Cheyennes, and Apaches. A skim of the literature would have produced a similar list.

When asked why they thought the Indians came to the region, most of the informants said it was to hunt, or to look for food. Several of the informants also commented that they thought the Indians only migrated or traveled through the region, and did not permanently reside there.

As to where they came from, several informants mentioned that they came from reservations. One informant said they followed the Santa Fe Trail into the area. Another informant thought the Indians came from Big Timbers. And one informant mentioned that they may have come from the vicinity of Bent's Old Fort.

CONCLUSIONS DERIVED FROM ABORIGINAL ORAL HISTORY

Long after they had been removed to the reservations in

Colorado, New Mexico, and Oklahoma, the Indians continued to use the area in and adjacent to the Fort Carson Pinon Canyon Manuever area to hunt game and gather wild foods. It was a subsistence strategy they never forgot. During the Great Depression which began in the late 1920s, they came back for a generation to reestablish a community in the area. In addition to hunting and gathering wild foods, they raised vegetables and small domestic animals for food and to trade for commodities which they could not make. Some of the Indians worked as farm laborers. Finally in the 1940s, big cattle companies expanded their operations into the Purgatoire River area and ran the Indians out. And once again they were forced to return to the reservations.

CHAPTER V: FIELD ETHNOGRAPHY

This section of the report presents ethnographic findings primarily derived from three on site visitations with Native American representatives of the seven tribes. On reservation interviews and public meetings were a source of additional information. Such information, however, addressed general concerns for Indian cultural resources such as burials, plants, and battle sites and was not specific to any known cultural resource in the study area. This may have occurred because these Indian people lacked knowledge of specific sites or they simply would not reveal the information at that time. A fuller discussion of this issue is presented in Chapter I of this report. On site visits, on the other hand, produce a rich array of interpretations of sites, archaeological features, and natural elements in the Fort Carson Pinon Canyon Maneuver area. The frame of analysis, or model used during the on site visits by the Indian tribal representatives to interpret traditional culture resources is termed the "Occupational Complex" model. This model is discussed at the end of this chapter where it is also placed within the context of a spatial archaeology paradigm.

SACRED RESOURCES

It is important, before discussing these cultural resources, to share a definition of what are Native American sacred cultural resources and to agree upon how they are to be determined. Since the passage of the American Indian Religious Freedom Act there has been a major attempt to specify how this law is to be translated into specific United States government agency regulations. A Federal Agencies Task Force (1979), in consultation with Native American traditional religious leaders, has summarized the thoughts of numerous interest groups regarding what are Native American sacred cultural resources and how they should be protected. Already this report has stimulated great controversy (see White 1980a, 1980b), and recent articles (Arnold 1980; Rosen 1980; and Winter 1980) suggest that the argument will continue.

For this report, however, it is necessary to find a middle ground in the definition of these resources that will be acceptable to most of the interest groups who have expressed their opinion on the issue. The following assumptions have been established by comparative studies of religion and are generally acceptable to Native American leaders, federal agencies such as the Bureau of Land Management, major corporations such as Southern

California Edison and the Los Angeles Department of Water and Power, and many professional anthropologists. In addition, these assumptions have been published in a article which defined key methodological elements of Native American Impact Assessment (NAIA) (Stoffle, Jake, Evans and Bunte 1981:5-6) and were part of our proposal to conduct the Fort Carson Pinon Canyon Maneuver Area sacred site studies (Stoffle, Dobyns and Evans 1983:6).

- It is assumed that human groups vary in the degree to which they define portions of their society, culture, and material resources as sacred rather than secular.

- It is assumed that when compared with many other ethnic groups in contemporary United States society, Native Americans generally define more of their social, cultural, and material resources as sacred.

- It is assumed that among sacred resources some can be more important than others and that this relative importance can be changed over time by group consensus.

- Inasmuch as the sacredness of these resources can and does change over time, no NAIA is complete without consulting with the potentially impacted group(s).

- A Native American group can define as sacred a wide range of resources -- from the food they eat, to the places they once lived, to activities they perform, to their ancestors' burials, to the trails they once traveled upon -- and only they can make such a determination.

Who has knowledge of and what constitutes knowledge of sacred cultural resources is a further important issue. Four types of Native Americans are often contacted in a NAIA: (1) official tribal representatives, (2) traditional religious practitioners, (3) group members selected at random, and (4) persons who have the most direct contact with the potentially impacted portions of the study area. The present study has drawn upon types 1, 2, and 4. Surveys were not sent out to type 3 people for reasons discussed in Chapter II.

Generally, these Indian people have three types of knowledge: (1) site specific knowledge, (2) site recognition, and (3) culturally-based logical interpretations. Site specific knowledge exists when Indian people can identify a sacred cultural resource and place its location exactly on a project study map without visiting the site. Such knowledge is rare because it requires an intimate familiarity with the terrain in a study area and the ability to translate this knowledge into an abstraction which is a study area map. Site recognition knowledge is passed from generation to generation and exists when an Indian person can use such knowledge to identify sacred

cultural resources through an on site visitation. These instances are by far the most common means of identifying Indian cultural resources. "Culturally-based logical interpretation" is a type of knowledge where an Indian person visits a study area site and makes "logical" interpretations of cultural features based on the cognitive system of his culture.

ETHNOBOTANICAL OVERVIEW

Dr. Ivo Lindauer, Professor of Botany at the University of Northern Colorado, conducted an ethnobotanical survey of selected portions of the study area. His task was to identify those plants selected by Indian representatives as being of concern and collect a set of voucher specimens. A list of the species vouchered and their reported uses is in Appendix B. These voucher specimens were then prepared, identified, and placed in the herbarium at the University of Northern Colorado. A second set of voucher specimens was shipped to Dr. Richard Stoffle where it has been placed in the herbarium at the University of Wisconsin-Parkside. The great majority of the ethnobotanical analysis presented in the following sections was provided by Dr. Lindauer's subcontracting report (1984).

The study area lies within the Grassland formation - a short grass region which is found east of the Rocky Mountains in Colorado. Within this region short grasses dominate the landscape and occur in a number of different associations. The uplands and more level topography have a high coverage of the climax association grama grass/buffalo grass (Bouteloua gracilis/Buchloe dactyloides). This association, however, gives way to the Pinon Juniper (Pinus edulis/Juniperus mexicana var. monosperma) woodland as one approaches the inner gorge of the Purgatoire River. A variety of community types and plant associations are found throughout the drainage areas of the Purgatoire River where erosional actions have provided many unique habitats. Some of these habitats and associated plants are described in the site specific descriptions that follow.

KEY INDIAN QUOTATIONS

The key quotations by Indian people presented in the following discussions, have been selected because they seem to best represent the dominant concerns and interpretations expressed by tribal representatives for cultural resources in general or at a site. If conflicting concerns or interpretations were expressed, both views have been included. Otherwise, it can be assumed that the concerns expressed in the quotes are shared by the other Indian people who visited the site. Where the Indian representatives felt it was necessary to place their concerns into a broader historic or ethnographic discussion the full quote was included even though some of it does not directly

address a specific cultural feature on a site. While this procedure has lengthened some site discussions, it is in keeping with the Indian perspective on how the world is organized.

Key quotes were taken from in-field conversations with Indian people who were officially appointed by their tribal government. Each tribe was requested to appoint two representatives: (1) an OTCR who tends to be a younger person familiar with the tribal government and able to summarize the findings of this report for the tribal council or chair and (2) a tribal cultural resource specialist who tends to be a respected elder. The OTCRs who took part in the Fort Carson Pinon Canyon on site visits were well qualified to fill this role. Viola Hatch is the vice-chairman of the Cheyenne-Arapaho Tribe of Oklahoma and is familiar with the Arapaho and Cheyenne languages. Nelson Elkriver works for the Ute Mountain Ute Tribe, speaks Ute and is familiar with the Cheyenne language. Douglas (Eagle) Remington is a member of the Southern Ute and speaks the Ute language. June Solvo is the public information officer for the Comanche Indian Tribe of Oklahoma.

Reuben Stumblingbear works in the Native Rights Office at Anadarko, Oklahoma. Viola Hatch, Nelson Elkriver, and Reuben Stumblingbear, in the absence of their tribe's cultural resources specialist, acted in that role as well during this June on site visit. Viola's parents have extensive knowledge of Arapaho plant use. Nelson learned about Cheyenne warfare from his Cheyenne father, who was a member of the Kit Fox (warrior) Society. Reuben's grandfather and Ike Satank signed a treaty in Medicine Lodge, later superseded by the Jerome Peace Treaty. It was this grandfather who taught Reuben about Kiowa history. While the three OTCRs knew much about their culture resources, they all consulted with tribal elders upon their return to their reservations in order to verify their conclusions. Neal Cloud, the Southern Ute cultural resource specialist, is a member of the Southern Ute Language Committee. Neal used knowledge of Indian sign language, which he learned from his father, to help him interpret rock art panels at the Fort Carson Pinon Canyon site. His knowledge of Ute religious ceremonies, including the Ute Sun Dance ceremony, was learned from his grandfather who used to run the Ute Sun Dances. Ray Niedo, the Comanche cultural resource specialist, speaks the earlier form of Comanche. He learned about Comanche medicine from his grandmother. His knowledge of plants used in religious ceremonies was learned from his grandfather who told him that his great-great grandfather had brought peyote, used in religious ceremonies, to the Comanches. In general, quotes used in Chapter V are those of tribal cultural resource experts.

Direct quotations have been used wherever appropriate. Guidelines for transcribing oral testimony have been adapted from Davis, Back and McLean (1977) Oral History: From Tape To Type. Transcriptions include verbatim quotes of field conversations between Indian people and project researchers. Previous research has suggested the value of leaving in the text indications of

pausing and disjunctions of thought. These breaks in the flow of the conversation can convey a better sense of the ideas being communicated. Some of the key symbols used in the following text are: (1) --a-- used to indicate uncertainty, (2) -- used for pauses or interjections, (3) ... used when the speaker's thoughts trail off and (4) the word "pause" is used when there is a long break in the flow of the conversation. Linguists and cognitive anthropologists have demonstrated that such elements of a conversation can be useful in improving our understanding of ideas being communicated across cultures (cf. Brant and MacCrate 1983). This procedure is appropriate because it permits Indian concerns to speak for themselves.

GENERAL CULTURAL RESOURCE CONCERNS

Both Douglas Eagle and Neal Cloud expressed concern that the coming generations of Southern Utes will lose control over and knowledge of Ute cultural resources. In the following interview, Douglas Eagle (D.E.) and Neal Cloud (N.C.) discussed with Richard Stoffle (R.S.) their general reactions to the potential destruction of Native American cultural resources. The discussion occurred on the Hogback at the Enclosure Site:

R.S.- All right. Let's say these things are old Ute places. What does it mean to you people today? How do the Utes feel about these places? Do they have importance? Significance?

N.C.- Maybe they do. To the modern Ute Indian -- the teenagers -- this is just be another pile of rocks. I mean, but they --a-- that's the first opinion that he would have, seeing it like this. But if they go deeper, well, if a deeper definition for it -- the history behind it, and then the curiosity, 'rouse your curiosity, and you have more questions to ask. Like, you know, the first -- initial conception would be just that; just another pile of rocks. They're too modernized today. And they say with all the Utes -- they live too modern -- easier life. Anything that intrigues the anthropologist is overlooked by the Indian.

R.S.- How about the older people? What kind of feelings might they have about these places?

N.C.- Well, --a-- going back to what this, --a-- there's an Indian back there, and he took the people over to Fort Garland, and they looked at that one place where the actual battle occurred. And he was there, or somehow he remembered, reminisced the whole area where a certain thing happened. And he spotted it out, and he even went up on a hill to point -- to tell the story to the other people. And --a--, to them older people

like that, they would have to, you know, there -- what happened actually, is --a-- it's in their mind. I guess it makes them feel good to tell the rest of the people what at that one spot particularly, according to that story, there was --a-- blood stains on the ground where that young fellow killed her.

Yeah, everyone of them's got a Ute name. And --a-- hearing it from the old people like that, you know, I don't even know the names of it myself, because, you know, they -- it's been kept secret all these years, and I never -- nobody ever paid any attention to it, but today we're starving for information. And we got no place to go, but we try to get -- we're trying to do the best we can ...

R.S.- Are there some of the young people that are starving for the information, too, or...

N.C.- Well, --a-- like I stated, when you get curious and aroused, you have many questions to ask. And you didn't realize you're being deprived of historical events until you dig into it.

R.S.- All right, let's say a place like this (the Enclosure Site) ... was to be destroyed? What would the destruction of this place do?

N.C.- Well, it just goes back to that T.V. commercial that -- where that Indian looks at all that trash, and you know that a Indian likes to live close to nature as much as possible where there's not much trash around. Everything -- left everything naturally the way it was. So it applies here also. He would rather see it the way it is. To preserve it so that someday their grandfather, if he's still alive, he'd tell 'em the stories behind it, what happened to that certain area, what happened there.

Unfortunately, some of them don't have no grandfathers, you know, they die way before they ever tell their offspring, or whatever. So it just goes back to the natural explanation of what the T.V. commercial tells.

D.E.- I think, off the record, when a culture is deprived from a group, especially a young group, which is happening now, and they're not aware of the type of path, and then they become educated, and then they become curious, and then they become angry, because all this information has been -- has been kept from them. And it's not necessarily that they're angry at the social anthropologists or other people in the academic world, but probably, sometimes they take their anger out on their own people. And then their -- their rules

for being an Indian are more stringent than the rules or qualifications for being an Indian that the old people have. And it's very strange sometimes...

R.S.- So you're saying that there's only contemporary concern, perhaps, among a few middle-aged to young-aged people, who are sensitive to the old culture, and some old people, but there's this potential concern that will be there down the road among some of the people that are going to college.

N.C.- Well, I have a contradiction for that. You don't necessarily have to be educated, just your curiosity. And some, like today, some of us are fortunate that we can -- fortunate enough that we talk the Ute language. And then those guys are lucky and they're being told...(UWP field notes: 7/30/83, Tape 13, Side 1; Time 387-450.)

Teenagers didn't get the chance to be told by the older people. And some of us, we carry our tradition. That's the reason why it's alive today. Other than that, why it would just disappear. That's the human nature. It applies to Anglo and Indians all alike. So that's my explanation for it -- it's just curious. (UWP field notes: 7/30/83, Tape 13, Side 1; Time 000-007.)

Neal Cloud discusses reaction of tribal elders concerning his on site visit for the Fort Carson project in Pinon Canyon:

N.C.- Well, like when I first told my parents about it, that I was coming out to this area, they started talking about it, and says, "Well, it is possible -- would it be possible later that we might take the tribe out here to look at the place" And they, you know, and they said maybe possibly if we, me and him, try hard enough we could persuade the people to, you know, bring them out -- the older people. And then they like to look at it. But they rather come out in the fall when it's cooler. You know, in the fall it's easier for them to, you know, walk around and so forth. And all the snakes and animals are hibernating usually. They know that there's snakes out here.

R.S.- Do you think that some of the older people would have, either themselves or have had grandparents, that were out here?

N.C.- Well, like today, we only have that one guy, and he's older -- older than my dad. And -a- whatever stories they've heard in the past, they don't -- they don't tell you unless you ask them.

R.S.- So you'd have to bring them out and ask them the

story and see if it worked here on the site?

N.C.- Yeah. A few years ago, it might have been possible if they'd looked at the place, they would recognize it. Oh!, you know, it registers in their mind, "I remember reading about something like that," and they start coming out with a story, you know, it was always -- it occurred there. See that's how they remember it. As far as we're concerned, we're just trying to figure it out here -- a hypothesis here. You know, what I think is, I'm using my instinct here --a--, you know, natural -- like I say, that's a hiding place, you know, common sense tells me that it would be ideal for me to hide from you guys. (UWP field notes: 7/30/83, Tape 13, Side 2; Time 043-065.)

SUMMARY OF SITES VISITED AND CONCERNS EXPRESSED

The following portion of this chapter that addresses specific site concerns is organized into two parts. The first part provides a summary of the fourteen sites where Indian people were taken during the three on site visitations. Each site is briefly discussed in the text. Two tables summarize which sites were visited by which Indian tribal representatives and what types of cultural resources were identified. The second part discusses each site in detail and presents key quotes from the Native Americans who visited the sites.

Native American representatives of the seven tribes were taken to a total of fourteen sites. The sites initially were selected upon the recommendation of the Denver University archaeologists because neither the project researchers nor the Indian representatives had been to the study area. Indian representatives did express a desire to see sites that potentially contained a full variety of cultural resources. So the DU archaeologists guided the team to sites with abundant archaeological remains like the Sue Site (5LA - 5255) in Van Bremer Arroyo which was a large habitation site. They also guided the team to sites with few archaeological remains like the Big Water Arroyo where abundant plants can be found.

It was not possible to arrange for the representatives of all seven Indian tribes to be on site during a single visit. During the weeks between the three on site visits the Denver University archaeologists discovered a number of new sites. As a consequence, later representatives had the opportunity to choose between more sites and often elected to visit different sites than had the earlier tribal representatives. Table A presents the sites visited by the Indian tribes that made the visits.

Just as there was some variance regarding which Indian tribal representatives visited which sites, there was variation regarding the type of concerns expressed for certain sites.

Table B provides a summary of the types of Indian cultural concerns that are present in various sites. The most common concern focussed on the protection of what is called "rock art." Nine of the fourteen sites contained either rock peckings (petroglyphs) or rock paintings (pictographs). Concern was expressed for plants located at seven of the fourteen sites. Ceremonial concerns were expressed at seven of the fourteen sites. Four of the fourteen sites contained concerns for resources that can be generally categorized as being associated with living areas. Six of the fourteen sites contained food or tool processing resources for which concerns were expressed. Only one site contained cultural features which were identified as potential Indian burials.

Overall, some type of mitigation recommendation is being made for thirteen of the fourteen sites. It should be noted, however, that mitigation recommendations are not being made for every expressed Indian concern. Similarly, no one site contained all of the full variety of Indian cultural resources.

The mitigation recommendations that are presented in the last chapter reflect levels of concern. So, for example, there may be a concern expressed for a type of plant located at one site but because the plant is relatively common no mitigation is recommended. In such a case the Indian concern reflects disappointment that any specimen of the plant variety be destroyed. Thus availability and distribution are factors in the level of Indian concerns. Some cultural resources, however, are not subject to such criteria. Most common within this category are burials and ceremonial sites.

TABLE A: INDIAN TRIBES BY SITES VISITED

SITE NUMBER & NAME	INDIAN TRIBE*						
	C/A	C	K	KA	JA	SU	UMU
5255 (Sue Site)	X		X			X	X
5496 (Deer Petro.)	X		X				X
5481 (Hog.- Map)							X
5547 (Hog.- Cairn)		X				X	
5554 (Hog.- Enclosure)						X	
5598 (Kill - Boulders)						X	
5235 (Rock Crossing)	X		X				X
5292 (Taylor Shelters)	X		X				X
No Number (Big Water Gardens)	X		X				X
No Number (Playa Lake)	X		X				X
5563 (Fuzzy Canyon)		X					
5454 (Lockwood Stage)		X					
No Number (Jack's Point)	X	X	X			X	X
5336 (Collecting)		X					

* Key To Tribal Names: C/A= Cheyenne/Arapaho, C= Comanche, K= Kiowa,
 KA= Kiowa Apache, JA= Jicarilla Apache, SU= Southern Ute, UMU= Ute
 Mountain Ute

TABLE B: INDIAN CULTURAL CONCERNS BY SITES VISITED

SITE NUMBER & NAME	INDIAN CULTURAL CONCERNS*						
	RA	P	C	LSM	FTP	B	M
5255 (Sue Site)	X	X	X	X			X
5496 (Deer Petro.)	X						
5481 (Hog.- Map)	X						X
5547 (Hog.- Cairn)	X		X				X
5554 (Hog.- Enclosure)	X				X		X
5598 (Kill - Boulders)	X		X		X		X
5235 (Rock Crossing)	X	X	X	X	X		X
5292 (Taylor Shelters)		X		X			X
No Number (Big Water Gardens)		X			X		X
No Number (Playa Lake)							
5563 (Fuzzy Canyon)	X	X	X			X	X
5454 (Lockwood Stage)	X	X		X	X		X
No Number (Jack's Point)			X				X
5336 (Collecting)		X	X		X		X

 * KEY TO INDIAN CULTURAL RESOURCE CODES: RA= Rock Art, P= Plants, C= Ceremonial Site, LSM= Living Site Materials, FTPS= Food/Tool Processing Site, B= Burials, M= Mitigation Needed

SITE BY SITE DISCUSSIONS

The following section discusses each of the previously mentioned fourteen sites. Each site discussion contains a brief description of the site, a map specifying the site's location (in Appendix D), key quotes by the Indian people who had the opportunity to visit the site, and, when available, a summary of the botanical characteristics of the site and appropriate photographs of cultural resources.

SUE SITE (5LA - 5255)

SITE SETTING & PLANT CONCERNS. This site, visited on June 16, 1983, is located near the lower forks of Van Bremer Arroyo (see Appendix B:Figure 10). This site is typical of the regional drainage that scours the prairie along the Purgatoire River. The vegetation of the upper slope and adjacent prairie is exemplary of the short grass prairie of this region, which is dominated by grama grass (Bouteloua gracilis) and buffalo grass (Buchloe dactyloides). The drainage slopes, however, contain a variety of species including Junipers (Juniperus spp.) and several berry producing shrubs more commonly associated with the foothills of the east slope of the Rocky Mountains in Colorado. The terrestrial vegetation adjoining surrounding springs and small streams contains many phreatophytes such as willow (Salix sp.), cottonwoods (Populus sp.), and salt cedar (Tamarix sp.) and a variety of forbes, grasses and sedges which are representative of those found along the flood plains of the Arkansas river in eastern Colorado (Lindauer 1970, 1983).

The Sue Site was visited by the Southern Ute, the Cheyenne/Arapaho, the Kiowa, and the Ute Mountain Ute tribal representatives. The plant species found at this site which are of concern to the tribal representatives who visited the site are as follows.

Sweet sage (Artemesia tridentata) found on both slopes of the drainage was used by the Kiowa, Cheyenne, and Arapaho Tribes for sun dances and other ceremonial activities. It was often used during ceremonies where peyote (Lophophora williamsii) was consumed. Yucca (Yucca glauca) found on both slopes of the drainage was used for shampoo, burns, and injuries. The blossoms and pods were often boiled for food and the roots were used for soap.

Skunkbrush (Rhus trilobata) is found on north slopes, in dry drainages or similar sites, typically on clay soils having greater soil moisture than adjacent areas. The red berries of this shrub were pounded into cakes, dried, and used for winter food. A pudding was commonly made from the berries of this

shrub. The bull thistle (Cirsium undulatum) found on lower slopes was not common in the study area. The purple flowering heads of this plant were dried and pounded into a powder for use on injuries.

Juniper (Juniperus mexicana var. monosperma), commonly called "cedar" by both the tribal representatives and area locals, is wide spread throughout the Van Bremer and Purgatoire riverine drainages. The needles of this tree were boiled and made into a tea for treatment of the common cold and stomach ache. In addition, the smoke from burning needles and bark was used to purge evil spirits from the bodies of misbehaving children and of women prior to childbirth.

Cholla - shrubby opuntia (Opuntia imbricata) and prickly pear (Opuntia polyacantha) are common cacti of this area. The mature red fruits of both species were prepared in a variety of ways and eaten. The value of this Native American crop is discussed in Chapter III in connection with the Kiowa sun dance.

The prairie sunflower (Helianthus annuus) was present at this site but was not common. It was thought by some of the tribal representatives to be used as a food source but none were certain of this interpretation. Sand verbena (Tripleroxylon micranthus) was found on the sandy soils in the stone circle and rock shelter (No. 5254) portions of the site. Milkweed (Asclepias latifolia) was found at several locations near a water source. Portions of this plant were used to remove warts and to aid in the healing of injuries.

The willow (Salix amygdaloides), usually a tree, was used to build shelters for the camps. Salt cedar (Tamarix sp.) was used by the Ute Mountain Ute Tribe to build cradle boards and for house construction. This was a historic period adaptation to a plant introduced by Europeans.

OTHER CULTURAL CONCERNS. In addition to plants of concern to Indian people, the Sue Site contains rock art and living site materials of great variety. Indian interpretations suggest a central function in relation to other types of sites for this major camping area. Many considered the Sue Site the central cog in an "Occupational Complex;" a concept that is defined at the end of this section.

KEY INDIAN QUOTES. At the Sue Site, a number of stone circles were found. Originally, these circles were thought to be tipi rings. Many of them, no doubt, are just that. However, another interpretation was given a certain stone circle by Neal Cloud, the Southern Ute cultural resource expert:

R.S.- Could this --a-- could this stone circle be anything else other than the bottom of a tent (tipi)?

N.C.- Well, let's see. Right where the sun hits

direct. It -- it seems to be in line with -- towards the sun. You know it? Well, the sun's right about there an' this is just -- right --a-- right --a-- in line with the sun. So, I'd say it was -- if it's in line --, why, it's some kind of a ceremonial thing. (UWP field notes: 7/31/83, Tape 14, Side 1; Time 047.)

The interpretation of this stone circle as possibly being ceremonial is influenced by the fact that no fire hearth is connected with this particular stone circle. Again Neal Cloud helps with the interpretation:

R.S.- What kind of ceremonial would it be? Did the Utes have any ceremonies like that or would it have been somebody else's?

N.C.- Well, long ago there were many things that we did, and some of it has disappeared over the years.

R.S.- So it could have been an old Ute ceremony, maybe, of some kind.

N.C.- Yeah, some kind. Well, there is --a-- We had a dance, a victory dance, where we dance around in circles after that was done. After we scalped our -- the enemies. An' --a-- usually the women --a-- put those scalps on a pole, and they always put in circles, and they dance around it, which means they're victory -- victory dance. Possibly that could've been that kind of a dance. (They) went around it. That's what --a-- them rocks were for, probably. Used to hold up them poles that the --a-- scalps were hung on. (UWP field notes: 7/31/83, Tape 14, Side 1; Time 073.)

The possible ceremonial function of the Sue Site is strongly influenced by its location near the Hogback and out of sight from most of the surrounding country. Neal Cloud pointed to the relative secludedness of the site as a factor:

R.S.- Does this look like the kinda place that anybody -- that Utes would, camp from time to time, in here?

N.C.- Yeah.

R.S.- You know, you're talking about buffalo hunts and all and...

N.C.- It is -- it is a kind of a ideal place for -- a kinda -- to hold a dance like that. The reason why I say it is, you can't see this from a distance. 'Cause we got canyons walls all around.

R.S.- Yeah.

N.C.- And if you was doin' -- gonna put on a dance,

this is a ideal place to put on a dance. You know, you don't want to be seen from a distance.

R.S.- Yeah.

N.C.- See that there -- other parties out there lookin' for you, after you just scalp a few of -- a whole few of their bunch. So you have to do it in a secluded place. Well, this is it! (UWP field notes: 7/31/83, Tape 14, Side 1; Time 116.)

At the Sue Site, many petroglyphs were discovered. Neal used his personal religious experience and knowledge he gained from his grandfather to interpret some of the petroglyphs:

N.C.- I think this was the Sun Dance. In the beginning this was -- this part here would resemble the -- our Sun Dance. And this one, rather than being a turtle, represents the Sun. The Sun from the east. And when we did or do our --a-- Sun Dance, we dance to the pole, it was literally single pole, like this. And this one going this way -- Today we have a, a -- In between they put the -- a -- what do you call it -- the rope... And then, you talk about, right inside the -- they hang the buffalo head. But originally, this is the way this was, this part here. And this is the dancer, and this is the way they dance. This is the dancer and this is the dancer's helper. Yeah, this is --a-- either feathers comin' in like this goin' towards the pole. You know they come in like this.

R.S.- Yeah, the feet are towards the pole, aren't they?

N.C.- Yeah, and this was the -- I think this is what that represents. So that, this is definately Ute.

R.S.- Would this represent the sun?

N.C.- Yeah, that's what --

R.S.- Or would this represent the sun?

N.C.- Well, this one's here bein' with it --

(short discussion in Ute between Ute representatives)

N.C.- See, the way we do it is -- except the way they make the corral -- it's wrong. It's not -- See, they always face the entrance -- towards the sun. Which would put it about like that. And where the moon comes out when it's full. Full moon. It's a -- it comes like that, (snaps fingers for emphasis) the full moon. Either of these things represents the moon or the sun. (UWP field notes: 7/31/83, Tape 14, Side 1; Time 214.)

The Southern Ute representatives interpreted many petroglyphs as being ceremonial dancers. Their confidence in their interpretation of the site and its petroglyph panels grew as the on site visitation of the Sue Site continued:

N.C.- And this one is probably a dancer too.

D.U. Archaeologist - Here's another one of those -- O.K., kinda like the horns.

N.C.- Yeah, I remember my uncle. He used -- when he danced he always put something on his head.

D.U. Archaeologist - Um hum.

(short discussion in Ute between Ute Representatives)

N.C.- Yeah, they had a beaded thing and then they had a feather. This -- what this one, seems to me, represents. (UWP field notes: 7/31/83, Tape 14, Side 1; Time 285.)

Neal Cloud interpreted other petroglyphs that he thought were probably drawn by Utes but were descriptions of enemies. Neal Cloud said that this was one method used by the Southern Utes to teach to their young ones the way the enemy looks:

R.S.- You think that -- Well, would the Sioux do a Sun Dance? Or would this site possibly be used by different groups for different purposes?

N.C.- Well the --a-- the sun -- the Sioux -- 'Member we said they hung by their chest muscles onto the tree? And that one doesn't show that. But I think --a-- the Utes, being that they're --a-- were our enemies -- enemies, would --a-- draw pictures.

R.S.- Of the enemy?

N.C.- Yeah. See that's what this one represents. The headdress -- a Ute --

R.S.- Of a buffalo?

N.C.- You know, there's --a-- you know there's --a-- ceremonial dance -- war dancing outfits that, you know, they got them cap-type things with the horns on 'em? And some of them have the war bonnets with the horns on 'em. You seen 'em take -- you seen 'em in books.

R.S.- Yeah.

N.C.- So that definitely what this is.

R.S.- You could draw a picture of your enemy as part of

your religious ceremony?

N.C.- Right. You know just like --a-- when he was tellin' -- teachin' the young generation, you know, what your enemy looks like. You know? (UWP field notes: 7/31/83, Tape 14, Side 1; Time 334.)

DEER PETROGLYPH SITE (5LA - 5496)

SITE SETTING. The Deer Petroglyph Site is located near the extreme southern end of the Hogback on a small stream that flows into Van Bremer Arroyo from the south (see Appendix B:Figure 10). The site contains a series of petroglyphs that are pecked onto the side walls of a small arroyo and a panel of red pictographs. The site is so named because of a clear petroglyph of a deer with a large rack of antlers (See Plates 8 - 11).

PLANT AND OTHER CONCERNS. This site was visited by representatives of three tribes: the Cheyenne/Arapaho, Kiowa, and Ute Mountain Ute. Because of its water supply this site contains a variety of trees: cedars, junipers and cottonwoods. However, the Native American representatives that visited this site expressed no strong concern for the plant communities in the area.

KEY INDIAN QUOTES. In the following discussion, Nelson Elkriver (N.E.), a Ute Mountain Ute representative, gives his interpretation of the site. He also discusses a portion of the rock art panels at the site:

R.S.- What kind of site would this be?

N.E.- A temporary camp site -- passing through.

R.S.- Temporary, nothing really in it in terms of...

N.E.- Just to water horses.

R.S.- Water the horses and come through. How 'bout those markings down there. They were painted so...

N.E.- Yeah, they probably went over there and marked that. That looks like that map that we were looking at that -- Viola (the Cheyenne/Arapaho representative) saw that squiggly line mark.

R.S.- Yeah.

N.E.- That looks like they drew it again.

R.S.- So that's a map to...

N.E.- Map to something, or a message to someone. There



Plate 8. Deer Petroglyph Site overview.



Plate 9. Ute Mountain Ute OTCR, Nelson Elkriver, at Deer Petroglyph Site.



Plate 10. Kiowa Tribe OTCR, Reuben Stumblingbear, at Deer Petroglyph Site.



Plate 11. Cheyenne-Arapaho Tribal OTCR and Vice Chairwoman, Viola Hatch, recording pictographs at Deer Petroglyph Site.

here must be a site that somebody knew about it. They say, "we'll stop here or something, and move on -- get the message." Graffiti.

R.S.- But if it was graffiti, it should be repeated over and over, you know, lots of Every time somebody came through, they'd put something different on it.

N.E.- Yeah, it's probably just a message. Something for somebody. (UWP field notes: 6/17/83, Tape 2, Side 2; Time 283.)

Some sites would only be utilized during certain times of the year. Generally, this is related to the availability of water at a location, as Nelson Elkriver points out:

N.E.- I expected there was water around here. It's still running.

R.S.- Sure.

N.E.- Springs, a June camp, came from up higher -- the water.

R.S.- A June camp you say?

N.E.- Could be. Well, as it is today -- here's some water there --

R.S.- Yeah.

N.E.- Probably next month there may be no water. (UWP field notes: 6/17/83, Tape 2, Side 2; Time 314.)

Included in this concept of seasonal camp sites is the idea that sites would be chosen according to their function and the season. Summer sites had to have water and other varied resources. Winter sites require water, but must also have protection from wind and cold.

HOGBACK - AREA MAP (5LA - 5481)

SITE SETTING AND PLANT CONCERNS. This site is located at the southeastern end of the main portion of the Hogback (see Appendix B:Figure 11). The major feature of the site is located at the high point on the Hogback (elevation 5513) where a number of petroglyphs were recorded.

The tribal representatives did not identify any formerly unrecorded plants of concern on this portion of the Hogback. Those that were identified were of low level of concern. In order to document the plant communities in this type of

ecological zone, Ivo Lindauer identified and collected the following characteristic plants: prairie clover (Dalea candida), gaillardia (Gaillardia pinnatifida), sand dropseed grass (Sporobolus cryptandrus), sandwort (Arenaria hookeri), bladder pod mustard (Lesquerella fendleri), and uncommon shrub (Forsellesia planitierum), hop tree (Muhlenbergia torreyi), yellow daisy (Hymenoxys acaulis), yucca (Yucca glauca), sage (Artemesia tridentata), and bull-thistle (Cirsium undulatum).

OTHER CULTURAL CONCERNS & KEY INDIAN QUOTES. This site was visited by Steve Chomko, of the NPS, and Nelson Elkriver, of the Ute Mountain Ute tribe. Native American interpretation suggests that the petroglyph, located at the crest of the Hogback, possibly represents a map of portions of the study area.

During the course of an evening at the Denver University archaeology camp, Nelson Elkriver talked with an archaeology crew member who had found a petroglyph on a boulder near the highest point on the Hogback. The archaeologist interpreted the petroglyph as possibly being a map of the area. The following day Steve Chomko and Nelson Elkriver visited the site. The following quote is part of a recorded conversation between Nelson Elkriver and Richard Stoffle which took place the day after the visit.

N.E.- Okay, once Steve and I climbed up to the top, there was a survey crew up there already. And they had already identified some writings there. It's probably about the highest point on the ridge, and that was the only part that I seen Indian parts, because it is a map. It identified the camp sites and it also identified that canyon that we were in earlier.

R.S.- Down low -- that low one?

N.E.- Right.

R.S.- With the stone circles?

N.E.- Right.

R.S.- Okay.

N.E.- Yeah, the stone circles and the one where the shelters...

R.S.- Okay, they call that the "Sue Site," because Sue found that.

N.E.- "Sue Site." Okay, "Sue Site." At the Sue Site, it's a way of people getting through and out through the ridge without having to go -- because it's cuts through. And it's identified on that as --a-- as a north to south line. And it identifies the --a-- the circle site, and also identifies to the northeast

another campsite where there's water. If you look down you can see the spring. That is identified as a campsite. Then there's two of the "C's," both inverted, and the regular "C," and those identify campsites. Two right, probably in the middle, and if you look down from there, you can see there...

R.S.- Would they be in -- near the Hogback?

N.E.- Yes, there on the north side of the Hogback. (UWP field notes: 6/20/83, Tape 3, Side 1; Time 164.)

Nelson Elkriver dicusses how the Map Site ties in with the Sue Site and for what purpose the petroglyph map might have been used:

N.E.- And it's all tied in together. From those markings down at Sue Site has something to do with the markings up on top and the ones over at the other side that we saw. Now the trails somehow tie together, somewhere in there. That's where I had gotten on top.

R.S.- Okay.

N.E.- It's -- it's a map for the scouts, who would return and report to chiefs at the campsites, at that point, that's where they would camp. And they'll -- I think in the beginning they might have camped for the -- for the stone tools that they used because there's -- there's abundance of that.

R.S.- Up on the top?

N.E.- Up on top.

R.S.- Okay, so there's some basic --a-- some stone material for...

N.E.- For tools and skinning and...

R.S.- Okay.

N.E.- That is what, that -- that's the parts -- That's why they have -- may have camped there at that time.

R.S.- Would they have used it as a lookout while they were in camp down there?

N.E.- Oh yes, oh yes, because it's a good view.

R.S.- Okay.

N.E.- It's just like the other site (referring to Jack's Point), it's a good view, but this is a little higher. From where I stand, I couldn't really see -- I

could see the tips of where we were standing at the other site.

R.S.- Well, could you see all the way up to Jack's Point?

N.E.- Oh yeah, you can see it from all the way up there.

R.S.- Now, do you think that other site would be out of -- out of this site or would that be related to this site?

N.E.- They're -- it's probably related and I think that's why a lot of these maps interrelate. The Arapaho lady (Viola Hatch) said that's probably inter -- interrelated. And there's trail systems in this. It may have been a major site here. May have been one of the campsites that they gathered at once a year. Maybe not this site, but that site, and if not that site, then this site. It's all tied in together. (UWP field notes: 6/20/83, Tape 3, Side 1; Time 155-192.)

HOGBACK - CAIRN SITE (5LA - 5547)

SITE SETTING & PLANT CONCERNS. This site is located near the central portion of the Hogback (see Appendix B:Figure 11). A basaltic dike runs along much of the northern portion of the Hogback. In various sections of this dike are petroglyphs. No plant concerns were expressed at this site (See Plates 12 - 17).

CULTURAL CONCERNS. This site was visited by members of the Southern Ute Tribe, as well as members of the Comanche Tribe. Representatives present were Neal Cloud (N.C.) and Douglas Eagle (D.E.) of the Southern Ute Tribe. June Sova (J.S.) and Ray Niedo (R.N.) represented the Comanche Tribe of Oklahoma. Ray Niedo was the Comanche cultural resource expert.

KEY INDIAN QUOTES. Located on one of the highest points of the basaltic ridge in the central portion of the Hogback is a large rock cairn. All parties involved agreed that the cairn was probably made by Euroamericans. However, along the basalt ridge on both sides of the cairn are petroglyphs. A great variety of symbols, stick figures, and life-like figures are present. Neal Cloud interprets a petroglyph containing a number of these figures:

R.S.- How 'bout these over here? There's some -- this whole ridge from here on has a series of small figures.

N.C.- They like to draw.

R.S.- What about this big one up here?

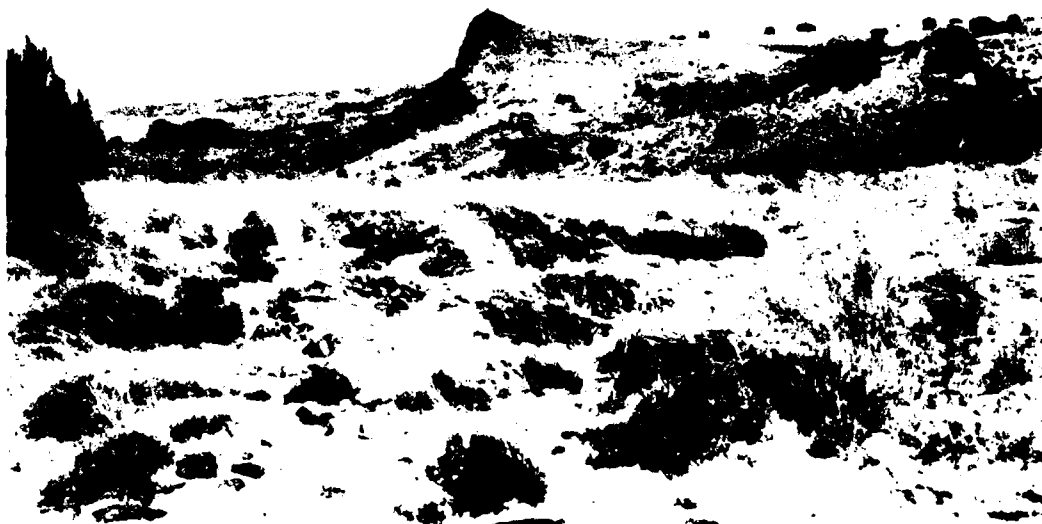


Plate 12. Hogback looking south towards the Cairn Site on the basalt ridge. Cairn is just visible at the top of ridge.



Plate 13. Co-author Dr. Richard Stoffle on the basalt ridge of the Hogback near cholla plant. Background is southeast view of study area.

N.C.- That's an old one.

R.S.- That's an old one also?

N.C.- Probably designating north, east, south, you know, like a map. Usually have that north -- south direction.

R.S.- Is that a person or an animal in there in the middle?

N.C.- It's a -- it's a person, got the legs here.

R.S.- Kinda' leaning over.

N.C.- Uh huh.

R.S.- Three running figures (see Report Cover Graphic and Plate 14). Actually there's quite a bit of life in the action of the arms, isn't there?

N.C.- Yeh, they were, which would mean that they ran toward -- this ridge for protection or something, that's what this would be, in the same direction. And this would mean --a-- you know, like on a map designating what north and south is. Well, it's got it over here, too. You know, it goes across and that one there, that -a-, that little symbol like that, there must be a cave here, or a cave. See, long time ago the Utes used to store their food and food supplies in a hole. So that's what that would designate. That hole representing -- must be in that direction.

R.S.- Oh, you see the open "C" as a hole?

N.C.- Yeah, a hole where there's a food supply.

R.S.- Or a cave?

N.C.- Yeah.

R.S.- Rather than "C" for campsite?

N.C.- It would have to be down in that direction by the arrow -- points to it by saying it. It's located within the vicinity. Possibly down here, probably buried over by now. Well, within -- within this area there's something hidden -- food supply. That's what the Utes used to do when they traveled, they always used a -- a hole -- natural cave for a hiding of food supplies... (See Plate 15)

R.S.- Would they symbolize a sacred site that way, too?



Plate 14. Southern Ute elder, Neal Cloud, looking at petroglyph of three running figures at Cairn Site. These are figures depicted in the cover graphic of this report.



Plate 15. Petroglyph of Open-C and "directional arrow" near Cairn Site.

N.C.- Well, possibly, too. Well, I'd say according to this picture that --a-- they ran through this thing and whoever finds it, say, at one time, they just look up on top. You know, it's easy for them to locate coming along the ridge and to find the mark and then within that vicinity there's a food supply hidden there. That's what that would represent to me.

R.S.- How about this --a-- rock cairn, is that a...

N.C.- Oh that, that's probably a survey marker.

R.S.- A what?

N.C.- Survey marker.

R.S.- Survey marker?

N.C.- Yes, they used all that long time ago -- bench marker -- old time bench marker. Later in -- later years, they used steel rods. You know when they, and that's a boundary line marker, whatever they say. You know, they had disputes over boundary lines. But the Utes had the same kind of system long time ago. And in order to cheat the other fellow, why they would pick up the rock and carry it off to deeper into their land.

R.S.- So moving boundaries is an old Ute trick? An O.I.T. (Old Indian Trick)?

N.C.- So, see that was...that is...

S.C.- A tradition...

N.C.- Yeh, it's so easy for the expedition, it'd be easy. (UWP field notes: 7/20/83, Tape 13, Side 2; Time 172-188.)

Neal Cloud discusses petroglyph writing in association with sign language used for communication by the Ute Indian people.

N.C.- Whatever appears -- looks that way. That's what it's --a-- usually, in Ute language, when they drew, when they --a--, you know, when they're talking to each other they use sign language. Something like this, you know, which means, this here, that person rode a horse, from up north, in that direction, rode a horse. And then from here it goes like this. And -- and then when you try to write it out, to the person you're talking to, like that symbol there, to another person, in order to interpret it, you know, well -- Them old timers could interpret it. They could tell you what happened. You walked so many miles and then from there you rode a horse and then from there usually a picture of a tipi or something. And that means that they rode a horse

and from there they walked so many distance and then a picture of sun or something representing how many days. If it's a month, well, it will be a picture of the moon or something like that. That means they traveled for one month. You know, so they know how many turns (inaudible). From that -- that picture, you can almost figure it out.

Well, -- my dad could talk in sign language. Not very good, though. But I've seen these older -- older --a-- people really go to it. Two of 'em usually talking -- go like that and --a-- you look at 'em. Well, just like on the T.V., where those little kids are taught how to spell nowadays.

R.S.- Yeah.

N.C.- You know, some ones are so good that they do it, you know, rather rapidly.

R.S.- So some of these rock peckings then might reflect sign language?

N.C.- Well, these people here (referring again to the report cover graphic), these people running, and that would mean that they ran to the --a-- dis -- what --a-- whatever happened out there. And they ran here for cover or protection or whatever.

R.S.- And they found refuge. The more I see this thing with the arms and the -- it's very graphic.

N.C.- Yeh, they really ran. With all their might, the way their arms are swinging, see? Up in the air. This would probably represent somebody who's very tired, barely making it. Very, very tired. Well, this person's ready to fall down. Where these two guys are in pretty good shape. Coming to this -- this would probably represent this whole thing. And this one here, I don't know.

N.C.- Something here.

R.S.- Now that looks like -- when you look at that, this looks like it's more on the surface. That looks like it's cut more deeply down into the rock. Do you think they could be different ages or do you think they were made at the same time?

N.C.- This would probably -- this was put -- put like that for a purpose so it would be --a-- easily seen by a person.

R.S.- Um hum. That's this one on the rock?

N.C.- Well, this would probably -- these would probably be these people -- three women that ran this area so they would have to leave --a-- some kind of a clue. For whoever's looking for them. So whoever's looking for them naturally would have to spot this sensitive, or conspicuous, place. Walking on the ridge, you'd notice that, but you'd never notice that, 'cause it's kind of on the flat side.

So then, from this you'd naturally have to look this way. And then interpret it, they ran in this direction. And this one here, I don't know what that would represent. This one is in line with the ridge here. (UWP field notes: 7/30/83, Tape 13, Side 2; Time 209-257.)

Richard Stoffle discusses with Douglas Eagle and Neal Cloud a petroglyph that was interpreted by Neal Cloud as representing Apache ceremonial dances (See Plates 16 and 17).

R.S.- Yeh, want to look at some of the other ones? How about this fellow?

N.C.- Here's another one here...this one, in this direction?

D.E.- Here's one that's kind of obscured by...

N.C.- There's another one there.

R.S.- The little isolated figure is one.

N.C.- This one for some reason, reminds me of those quadrablooney dancers. You know, the headdress like that?

D.E.- (Speaks in Ute to Neal Cloud.)

N.C.- Yeh, Apache. And that, see the body being (inaudible), and they got their cane. And this was -- and they got that something. Look at this one dancing.

R.S.-That looks more like an Apache. There's something being held in the hand. They were very careful to give it...

N.C.- Well, possibly feathers.

R.S.- Feathers?

N.C.- Uh huh.

R.S.- Feathers maybe here, too?

N.C.- Uh huh. Well, this is a feather, too.



Plate 16. Cairn Site inspected by NPS archaeologist, Stephen Chomko; Southern Ute OTCR, Douglas Eagle; DU archaeologist, Mark Guthrie; and Neal Cloud.



Plate 17. Cairn Site petroglyph of an "Apache" ceremonial dancer with feathers, blanket, and arrow quiver.

R.S.- Feathers in the hair?

N.C.- In a headdress. Some of them have it like this and some of them have it like this with their head. All variations of design.

D.E.- Well, some are, some Plains type, you know, have that headdress with the feathers -- the feather headdress. Have you seen that?

N.C.- Well, there're few, you know, there's two, three of 'em, maybe six people dancing when they all dressed differently. And they managed to have something on their head. And this would mean they have feathers -- two, three feathers. But that's what this looks like. And this one here represents something. Blanket probably. Looking at it this way.

D.E.- This was a blanket dance, that's what that would be.

N.C.- You know, they either --a-- some of them waved --a-- old animal hide. And --a-- that's what this would be.

R.S.- How about this across the chest?

N.C.- Well, that would probably be, you know, they --a-- a lot of people carried a quiver so that would be quiver. Rather than --a-- being just --a-- string on the side. Whoever drew it made it appear like that. You usually have your quiver.

Yeah, that reminds me of that, them dancers... Whereas a fighter carries -- always has his feathers, like this.

R.S.- Two feathers, in a fighter's hand...

N.C.- But the way that appears, it's --a--, they're doing it real quick. Well, you're bound to make little bit of mistake.

R.S.- Uh huh. Which one are you talking about now?

N.C.- Oh, we're just talking about over -- this one here, it's kind of like a head. This one here.

R.S.- Yeah, so light I can hardly even see that one.

N.C.- Yeah, it's very -- you can't make it out. But it takes a little bit, you know, you have to have an eye for it.

R.S.- Yes.

N.C.- You spot 'em when you have an eye, whereas the other person may not notice 'em.

R.S.- Uh huh.

N.C.- After a little bit of practice, you know, you can pick on. There's nothing on the side really, is there? ... they're all gone on the side here.

R.S.- These seem to be primarily on the top.

N.C.- Yeah. In order to do that, you have to have a lot of leisure time. And that's the way those were done.

R.S.- This rock's very hard, isn't it?

N.C.- Yeah, it is. What would be the cleavage of the rock, five, six hardness?

R.S.- Oh, at least, maybe more. So...

N.C.- Not having the right tools to do it with makes it kind of difficult.

R.S.- What kind of tools would they use?

N.C.- Well, you know like a metal. Well, with a metal tool you can very easily do it, but here they, a person, whoever did it, used a rock. You go like this, see? (he hits basaltic rock with another rock) Well, being that them pictures been there for so long. It's been, it was done at one time pretty deep.

R.S.- Right.

N.C.- Yeah, and this (referring to the marks on the rock he had just made) after a rain won't even last, will wash off and fade.

R.S.- So one would have to...

N.C.- Have to do it pretty deep. And after all these years, it's still standing here visible.

R.S.- Now would those things still be of importance to Indian people?

N.C.- Well, from the --a--, it may not be very important to the Oklahoma people because -- again -- it may be. But, since we Colorado Indians that lived here, you know, we considered this, Colorado, as our territory -- our hunting ground. So naturally, if we

were roaming around here, we'd be more relaxed and --a-- than those people, you know, like I said, you know, they were, they would be hiding if they ever got in here. You know, be moving around very hasty --hasty like. They'd kill a deer and then get out of here before the --a-- Utes caught 'em. You know, having that tendency. They wouldn't waste too much time. They better get out of here before they get killed. See, that was the --a-- danger part of it. You see, that's where primarily, they came up here to hunt and get game, you know. We were rich. We had the antelope. We had the buffalo roaming like as "thick as the cows" was the way they described it. And some other animals. Well, we had those berries, too. Probably at that time we had a lot of 'em.

So they (other Indians) were after those (animals and berries). So in order to get what they want they would have to move out of here quick. And then they wouldn't be moving around leisurely like the Utes would. Whereas the Utes, you know, there were seven bands of us roaming the whole state of Colorado at one time. And there was possibly families here and there, by themselves. So they roamed in kind of a leisure, like nothing to worry, because they knew that they were protected so they could do something.

But that's what that thing seems to me what it represents. It represents a cave -- possibly in that direction, where the food supply is hidden. You know, we still have those over at the Chimney Rock. Not at Chimney Rock, over at (inaudible) Creek.

To be frank, long time ago, my mother's people, when she was a little girl, they went down in that area and hid some food -- meat, sugar. We used to get rations in those days and there's a whole bunch of gold coins right along with it. And there was this one lady from Towaoc, that was in that. And to this day, my mother is the only one left that knows where it is. May -- may be possible someday that we could go in there and get it. Not the --a-- the --a-- food, but the gold that was stored in there -- this whole bag put in there and big rock put over it. But she was in a little doubt. She says, "I don't know whether I can still remember that -- that location. I might be able to recognize it if I saw it today." Since it was done when she was a little girl.

R.S.- They used to make signs like that sort of open "C" sign. Which would imply cache or something.

N.C.- Uh huh. Possibly that's what that could be, too. You know, that --a--, that can represent a hole down. See that one is money, it was a cave going down, not in

--a-- side -- it wasn't a horizontal direction

R.S.- Do you think then that there's a chance that these are Ute signs?

N.C.- Definitely! Definitely, because due to that --a-- that the Utes roamed this area in a leisurely manner -- leisure manner, see? (UWP field notes: 7/30/83, Tape 13, Side 2; Time 267-443.)

HOGBACK - ENCLOSURES (5LA - 5554)

SITE SETTING & PLANT CONCERNS. Only the Southern Ute representatives visited this site. It is located at a break in the Hogback near where the road passes (see Appendix B:Figure 12). On the Hogback are a series of stone circles or walls. The Ute representatives suggested that the site would serve as either a lookout or hunting blind. When driven, large herds of animals would seek out the break in the Hogback for escape. It is probable that this site is associated with the Sue Site as base camp. The site also appears to be interrelated with other Hogback sites at perhaps more than one functional level. The Southern Ute representatives suggested a key "gate keeping" function for this site guarding the southern entrance to the whole traditional occupational complex. No plant concerns were expressed on this site (See Plates 18 - 19).

KEY INDIAN QUOTES. The following quote is from a discussion which occurred between Omer Stewart, Richard Stoffle, Steve Chomko, Mark Guthrie and the two Ute representatives, Neal Cloud and Douglas Eagle while at the Enclosure Site. Neal Cloud begins by describing the possible lookout functions of the site.

N.C.- They would probably be stationed as scouts. Looking for enemies approaching.

R.S.- They'd build these rocks up to --?

N.C.- Camouflage.

R.S.- To camouflage them?

N.C.- Uh huh, they would build them up in line with the dike there. They be sitting here, they could stop any Indians approaching. So that's the reason why you'd probably...

S.C.- Individually. This is the only place along the dike. No, one other site, like this...where you'd go up before going through, right?

N.C.- Well, there's a tactic -- tactics for fighting. Maybe they had to sneak up the valley, see, low point.



Plate 18. Hogback Enclosure Site inspected by Stephen Chomko, Mark Guthrie, Omer Stewart, and Neal Cloud. In background is a northeastern view of study area.



Plate 19. Hogback Enclosure Site in foreground with narrow gap in Hogback in distance. Chomko, Eagle and Cloud discuss site.

Rather than coming over the high point. 'Cause they'd be spotted miles away. Even though you're up here doesn't mean nobody can get in. That was kind of a way of sneaking in.

(Pause)

R.S.- What is this bigger one?

N.C.- Well, it probably -- well, you know this is probably ten people or so.

R.S.- Ten people?

N.C.- Yeah, something like that, maybe fifteen. Now this would be a flat line -- flat. It's kind of stationed everywhere.

Seems like it's a protection -- like a fort. When the enemy comes where they have to have some kind of protection in order to fight behind. Or it might have been used for a corral for their horses. And the soldiers used the picket line.

R.S.- Would they -- now would they use an upper -- a higher area like this for the horses, or would they drop them off and put them off over the edge more?

N.C.- Well, this is not really high compared to that platform though. So this is probably for horses.

R.S.- This could be for horses?

N.C.- 'Cause --a-- for the persons it would be smaller. To keep their horses together. Horses are bigger -- bigger than humans. It's an ideal location, too. You can see all around. You can see way over here. See everything here to the next ridge over there, (inaudible) you can't see. You'd have to get up on top to see in that direction.

R.S.- So there should be others over there. Now what...

N.C.- You may not need it, but there was one there probably.

R.S.- But most of the people then wouldn't be up here, but they would be camped elsewhere, and these would be just lookouts in association...

N.C.- Usually. The Utes never -- never carried their families with them. It's the warriors that went out. They'd be where you guys are camped or some place like that.

R.S.- So even if there was a party of Utes out here, they would only have a few scouts up here; then the main party with the horses.

N.C.- Generally, maybe one or two out way in every direction. And that's how they were able to spot the enemy approaching from either this direction or that direction. And maybe send a scout out to warn the other party, the larger party, see? And if they -- they usually determine the size of the party that's approaching -- if they're many, they would have to send word out to the other bunches that are located all over and try to get them together.

And probably in a case like that, where after they gathered, then they usually attacked when the sun was coming up -- dawn -- if they found the encampment site, knowing that they'd still be asleep. One of the reasons for it is that right around where we live, in Ignacio, near Ezark, there's some places around there where we fought the Spaniards. And there was a massacre site right this side, about eight miles east of Ignacio. Their mistake was that the first Spaniards that went in there had those armors, see? And just 'bout completely wiped the Utes out right there. Bones scattered all -- everywhere. Even mule bones, you know, they were in there to bait the wolves. So -- well, after five years or so, they, you know, after leaving that area, they never came back. But five years later they were back again. And about that time they kind of -- sort of studied their -- what that thing was they were wearing. And so for that reason they decided to attack them in the, you know, during the early hours in the morning.

R.S.- Before they had their armor on?

N.C.- Armor on. Yeah, because the arrows were just bouncing off it. So they went in there and just clobbered them. And left about two. And that's the one that they turned loose. And this --a-- few gold that they were carrying, it's still buried in this area. And this is the way they came -- in this direction, towards Santa Fe. Tell their people that was the reason that I told it (inaudible). The Utes always left two or three alive, and always told them to tell their people not to come back. That was the way to extend message.

R.S.- That's how the lessons worked.

N.C.- Yeah.

S.C.- Yeah, if no one was around to tell it...

R.S.- It doesn't make a very good lesson that way. Ya gotta have someone go home and say, "Those Utes are mean little people."

N.C.- Well, I guess for that reason that they'd -- knowing that all that Spanish gold is worth all in that area hidden. A lot of those Mexicans from the south came up looking for it. And today they're still wondering where it's at.

D.E.- Yeah, all over Texas, New Mexico, Colorado. (UWP field notes: 7/30/83, Tape 13, Side 1; Time 064-156.)

Neal Cloud discusses with Richard Stoffle the probability of the Enclosure Site being a hunting site for buffalo, as well as other game. Hunting techniques are described in this interpretation by the Southern Ute representative:

N.C.- The hunters would be sitting here while the other fellows would be driving them in. And this is where you'd do the killing. Narrow -- narrow area. See, that's sort of an ideal place for that (See Plate 19).

R.S.- You're looking here. What direction is that? West. At the narrowing down there?

N.C.- There's a draw there, see?

R.S.- That would be a good place for hunting or trapping or anything.

N.C.- Yeah, driving them from the north, like the buffalo. The larger the buffalo, you can drive them through a narrower place and people sitting on both sides with arrows, and you can take your potshots at 'em. Take all the game you want when it comes slow down in here. When it draw into that little place here -- or anything -- deer, you know they have --a-- antelopes out here.

R.S.- Yeah, lots of antelopes. Still some out here. Let me ask you another question about this kind of corral and the fence area. Would it have been used by different groups? For example, let's say it was once built by one of the groups that were in here, would the Utes come and use someone else's corral? And then someone else use the...

N.C.- Well, I would say that this would be typical Ute. The other parties that were roaming into the area, they were sort of trespassing. Like the Oklahoma Indians. And you know, they were. This is the territory for the Utes, and you know, you coming into somebody's property, you know, you're going to steal buffalo just

to live on. Try not to leave any kind of evidence where they've been.

R.S.- Where they've been. So you would think that a permanent thing like this would not be... If it already existed would it be used by somebody else?

N.C.- Well, if it was natural, why yes. Anything natural or built.

R.S.- Would be used?

N.C.- Like this, you can see the gate. This is built. Like you, if you would --a-- use this for horses, you have to have an entrance. Well, you have entrance right here.

R.S.- Did the Utes have any medicine that would protect a place like this to prevent...

N.C.- Possibly something like that, kind of a curse sort of thing to protect it, you know what they say, the gods protect this place and so forth. For it's only natural, you know, the people -- especially the Utes, they would roam this area, so they would very easily build something like this. Can be used for a lookout.

R.S.- When you said they might bring in the game, were you talking about the little gap where the road goes?

N.C.- Yeah.

R.S.- Or that bigger gap down there?

N.C.- No, right down where the road is. Why it's down in the lower area. Well, this would have been ideal. Like if you had about two hundred head of buffalo, and all the people driving them. They have to drive them to the nearer spot so they can get to them, because buffalo are very -- very -- what are they called -- what do they say --a-- they're sharp and wise and they take off on the approach of a human. You know, like they gonna' be killed, and they could hear it.

R.S.- Uh huh.

N.C.- So, easy way to do it would be to chase 'em. Whole bunch of riders and drive them into a narrow gap like that, and then try to get all the game you can. And let it go at that, and not kill too many.

R.S.- I see. Okay. Now once they killed them, would they bring them up here to process them or...?

N.C.- Well, this probably, you know, --a-- that buffalo is awful heavy animal.

R.S.- So they'd do it right on the spot?

N.C.- Yeah, they'd do it on the spot.

R.S.- Would they have built fires up here?

N.C.- No, they would have to take it home -- take it home to their families. See, the women in the Ute families, they did the curing of the meat. Whereas the men folks would do the hunting and bring the game and that home. And the women do the tanning of the hides and so forth. That was women's job, and the men's job was going out to the line and fighting.

R.S.- Would they have under any circumstances have ever brought the women and the whole camp out this far?

N.C.- Usually they would be camped out way -- about nine miles away.

R.S.- Would they be like in the mountains or would they be...?

N.C.- Unless, maybe it would be like the camp where you guys are at (The DU Archaeology Camp). They'd had to be in the trees. Where the trees around, that would be a logical place to leave the children and the women. You know, you need some kind of a camouflage. Something like that -- like them trees. They would want to be left back there. See, in order to move -- moving the camp, the women always rode either horseback, or they walked. In their -- were carried on them -- what do they call them two sticks? Behind?

R.S.- Travois?

N.C.- Yeah. And the kids, they'd have to ride that, the little youngsters. You see it was awful difficult for women to, it (inaudible) for the warriors to do it, they just hop on a horse and take off.

R.S.- But if they were buffalo hunting, and they expected to get a lot of buffalo out here...

N.C.- Usually they'd kill many at one time.

R.S.- Wouldn't they have to bring the women for that, to dry the meat at that time?

N.C.- Well, after the kill, it's easy for the men to carry the buffaloes back.

R.S.- Oh, it is? So they could have a camp in the mountains, or at the foot of the mountains.

N.C.- Yeah, like the one you guys are at. It takes a lot of work -- have to have spent two or three weeks there curing the meat and...

R.S.- Oh, you're talking about down here at the archaeology camp. So a mile or so. See, because there are some, at the end of this, there are some tipi rings, and a place where there's --a-- some buffalo petroglyphs and some horses.

N.C.- Well, that's an ideal location where you're staying. After the kill was out here, and they'd have to carry, take them back there.

R.S.- Down there and cure it. So they would bring the women out to here.

N.C.- The women would be out there. Would possibly bring them out to help skin. See, they used every organ that's in the buffalo. The liver, the kidneys and so forth, so, the women, that's women's job is --a-- to preserve that, in order to make that into a food.

R.S.- So, if they got a decent size kill here, they would want a camp that's within a couple of miles. They wouldn't want to cart it all the way back to twenty -- forty miles away to another place. So they would -- what we're saying here is that it's possible that there were hunting camps with women present, and lots of tipis and stuff, as well as just lookout post here that might be used...

N.C.- Be used for both purposes. Well, see this ring here, this was ideal -- ideal sheet here -- the way it's flat. See, driving the buffalo from way -- supposedly they were about ten miles north of here, they would have to have a place to drive them in there. Not just one place, there may have been another place that looks almost similar to this place, so -- used for the same purposes. 'Cause, they never found the buffalo at the same place all the time. 'Cause, you know how animals are, they are never -- wherever they can find grass. It was said at one time that this was full of buffalo. "As thick as the cows in the fields," that's the way they described it. That's an Indian translation. That's the way my grandfather described it.

R.S.- From the way your grandfather described it?

N.C.- Uh huh. The way you see a herd of cattle, they

would get that thick all the over the plains.

R.S.- Do you think your grandfather was out in places like this?

N.C.- Yeah. Well, the, you know, the flat irons and boulder, that's where they stood up on a hill. And that's a story behind that. You see, that's where they first met that first covered wagon coming -- approaching across the prairies. And that's where they met. And they never seen -- never --a-- seen --a-- prairie schooners before. And so, the both of them said, "How." I wrote a little -- separate issue on that, what I heard. And that both of them didn't understand, but they could understand this hand raise, and so they say they built a house of wisdom -- is what they called it -- translated into English. But that's the reason the University of Colorado is located right there. You know, they came up and -- that's how he described it -- standing up on a hill, high points of the flatlands up there. They saw it approaching about thirty miles out, possibly more. He saw the schooners, I mean covered wagons (inaudible), never seen anything like it before, and couldn't figure out -- what it was. Were they enemy? I mean they --a-- could figure out was and that there wasn't many riders along. Which --a-- which gave them the clue that they came in and their intentions were peaceful. (UWP field notes: 7/30/83, Tape 13, Side 1; Time 156-176.)

KILL SITE - PETROGLYPH BOULDERS (5LA - 5598)

SITE SETTING & PLANT CONCERNS. Only the Southern Ute representatives, Neal Cloud and Douglas Eagle visited this site. It is located to the north of the Hogback just across a shallow arroyo that makes up part of the watershed of the Van Bremer stream system (see Appendix D:Figure 13). Here the stream has cut into a small ridge that is strewn with basalt boulders. The Southern Utes believed that the stone cliff combined with the arroyo to produce a drop-off where herd animals could be killed during a game drive. The Southern Ute representatives stated that the basalt boulders could have been used as maps to plan out hunting drives. They believed that some of the petroglyphs represented maps of the immediate area. It was further suggested, that such locations would serve as schools to instruct young hunters in the techniques of animal drives, particularly bison. The site is perceived as being in association with the Hogback sites and the main camping area at the Sue Site. No plant concerns were expressed at this site (See Plates 20 - 23).

KEY INDIAN QUOTES. The following excerpts detail Neal Cloud's interpretation of one of the typical boulder petroglyphs found in the area:



Plate 20. Kill Site looking southwest along "jump off" point with the Hogback in the background.



Plate 21. Kill Site looking northwest at Hogback with petroglyph boulders being inspected by Eagle, Chomko, Guthrie, and Cloud.



Plate 22. Kill Site with Cloud pointing to boulder petroglyph that may be a map.

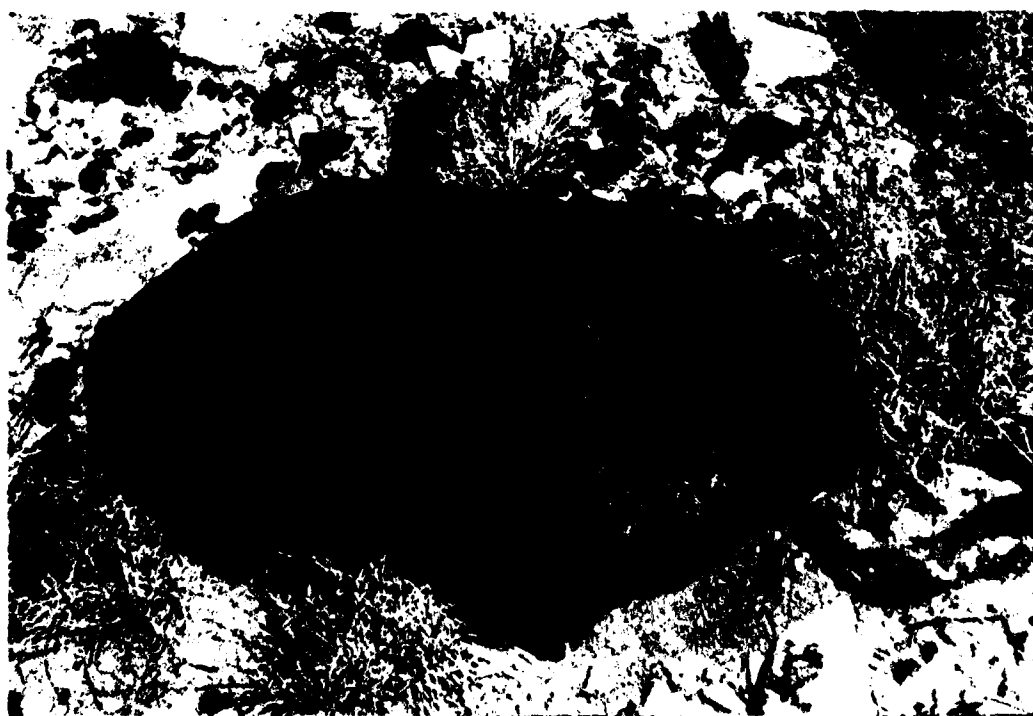


Plate 23. Kill Site boulder with elaborate petroglyph and desert varnish.

R.S.- So you think that -- maybe these lines represent the ridges and valleys? (See Plate 22).

N.C.- Yeah. See this long one represents this one.

R.S.- Yeah, Van Bremer.

N.C.- Um hum, Van Bremer. Yeah an' then another valley representing the valley should, if it's twin sized, which the valleys were, that's what it would mean. And from the south it'd be two valleys coming up, joining, and two from the north. And like that -- a fork, a "Y" up there. Another one coming this way. And this one would probably represent another -- another ridge up on that side.

R.S.- Another canyon?

N.C.- Yeah. You see, this would -- it's like a map, actually. When you're huntin' for, drivin', say wild buffalo, you know, you have to drive 'em down to these points. Against a high ridge and corner 'em right here. And take their -- what they want.

R.S.- It'd be neat to get a good map and orient it toward that (petroglyph) map. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 032.)

The general pattern of Indian interpretation that has emerged regarding the petroglyphs is that many of them are graphic representations of physical features of the surrounding environment.

R.S.- Now this one here, this one looks a little bit like that one down there. I bet there's some repeated pattern. Yeah, this is good. And if there seems to be a very strong tendency, and this is something consistent with the other time, of seeing these as maps.

N.C.- Yeah, there's that thing again...

R.S.- Graphic representation of physical features.

N.C.- These always seem to run from --a-- west, west to east, which would indicate this range (he points to the Hogback). And this one would indicate another little valley.

R.S.- That looks awful old too. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 305.)

Neal Cloud next discusses how an animal drive would be coordinated by the use of the boulder petroglyphs that are strewn

about the site. Neal emphasizes the importance of planning a drive and how it would be nearly impossible to undertake a drive without such planning:

N.C.- Directions -- see, you had to have at that time, to drive the buffalo. You know, you just can't say, "You go that direction and drive 'em this way." Well, they have to know which way down is -- have to come down on, you know. An' if this was -- it's another ridge, way out there, about ten or fifteen miles, maybe, or so. And the lines goin' into it is the valleys, you know, there. But actually if they get one, they drive him into this one. You gotta, you gotta -- sort of a trap. And that's where they, you know, sit and shoot. You know, according to old stories, that --a-- when they hunted buffalo on flat grounds, if they (the buffalo) saw you comin' at a distance, they take off. You never get near 'em. And it's not like today that, you know, with a seven millimeter we'd sit out here and shoot at 'em. You have to get 'em at close range.

R.S.- And they'd have to have a plan?

N.C.- Uh huh.

R.S.- And they'd have to sit someplace else just to discuss that plan. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 054.)

The Southern Ute representatives thought that this probably was a hunting site that would have been used by many tribes because it is located close enough for tribes from Oklahoma to come and use it for hunting.

R.S.- So you think this might be like an open hunting site then?

N.C.- Yeah. Yeah, that's what it was. See the -- the buffalo was over everywhere. They was so darn --. This particular area especially, because you have those hunters comin' up north from -- north from Oklahoma. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 067.)

Neal Cloud could not interpret another petroglyph boulder near by that contained an straight line scratched through a circle. While there were many features in this site that Neal Cloud could interpret, many other features were beyond his experience and he was clear to note this.

R.S.- A circle with a line through it.

N.C.- The line through it would be an arrow. But what does it mean -- the circle representing? (UWP field notes: 7/31/83, Tape 15, Side 1; Time 076.)

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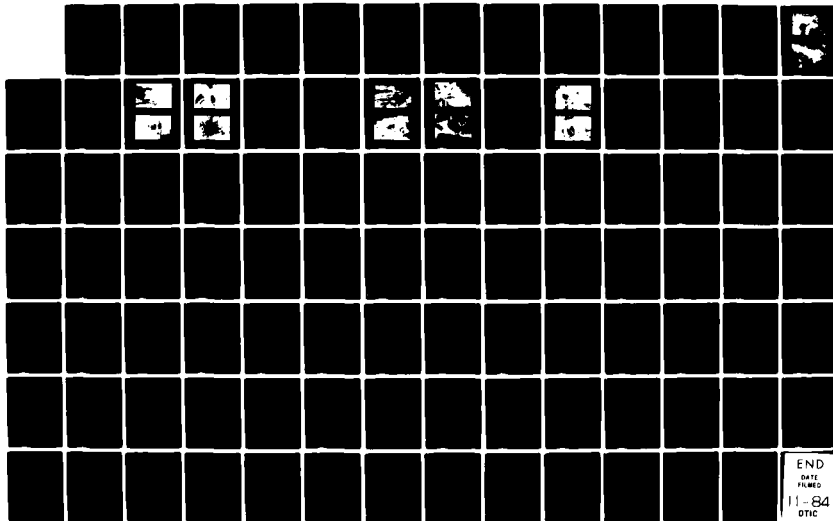
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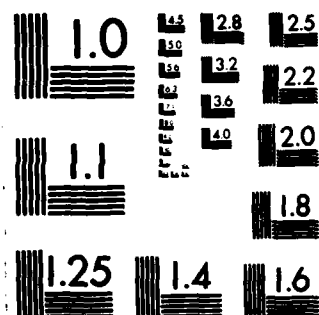
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If the area was a kill site, according to Neal Cloud, it would be in need of a shelter. According to him, the stone circle walls on the site may be protection against the herd during the drive. He also suggests that animals that survived the drive over the edge of the arroyo would be driven against the north side of the Hogback where they could be trapped and killed at the head of the shallow draw that leads down to the Van Bremer Arroyo:

N.C.- Yeah, yeah but this -- these flat countries were full of buffalo. And --a-- if it's located down on a lower point, it was a kind of --a-- point where a hunter would --a-- have a protective shelter, sort of. When you stampede half a million head of buffalo, you got to have some kind of protection around you.

R.S.- Might even be a -- stampede area in here?

N.C.- Yeah.

R.S.- How? (pause) Maybe the Van Bremer wash or draw? Maybe they ran 'em up against the side of this...?

N.C.- Yeah, they had to have. And then --a-- if they come from this direction (pointing to the north) you would have to have some kind of a shelter.

R.S.- Yeah? Wouldn't that imply that there would be some sort of kill sites up -- up in that area (indicating the north flank of the Hogback)?

N.C.- Yeah. (UWP field notes: 7/31/83. Tape 15, Side 1; Time 084.)

The possibility of the Kill Site being part of the occupation complex connected to the Sue Site is discussed in the next quote. Neal Cloud also discusses the possibility of another kill site being within about twenty miles of the Kill Site. Again these data suggest that the large portion of the study area may have been a single occupation complex.

R.S.- If this is a site for the killing and processing of food, what would it have that'd be different than, say, another site like -- that we were down in yesterday with all the tipi rings? Would it not have tipi rings? Would it not have been a place where they would have stayed long enough to put the tipis up? Now that's only about three or four miles (to the Sue Site), would they have done some butchering here and just had a big camp down there?

N.C.- Yeah, 'member that, that --a-- that buffalo roamed everywhere. You never knew where they were gonna be so they had to have a place like this set up.

So they have to drive them from, maybe -- like twenty miles away to this location where, say -- butchering area like that.

R.S.- You see this as a much more -- you already said this but I'm just repeating it -- You see this as a much more temporary kind of site.

N.C.- Yeah, a killing site.

R.S.- A killing site.

N.C.- Maybe within twenty mile radius...

R.S.- And then they would be brought in -- they would be driven into here, and then the meat processed.

N.C.- If you look, maybe, another twenty miles away you might find a different (site) resembling this kind of terrain. Which was another killing area. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 232.)

(Break in conversation while walking over the Kill Site)

R.S.- So the Sue Site would have been an ideal camping spot.

R.S.- And this would have been a...

N.C.- A temporary area -- hunting area.

R.S.- A temporary hunting area?

N.C.- Yeah, that's where (the Sue Site) you had all them -- you dig deeper you probably find more -- burnt rocks or whatever's around. Where they spent a little bit longer time. See, you couldn't see from either direction. But there -- they're were have some Indians there.

R.S.- Yeah, so that'd been a good camping spot -- and that explains all the stone circles -- and these aren't stone circles like that, these are -- are walls.

N.C.- You had to have a center of operation -- from point -- point of operation.

R.S.- And that would be their center of operation for this area?

N.C.- Yeah. (UWP field notes: 7/31/83, Tape 15, Side 1; Time 394.)

ROCK CROSSING (5LA - 5235)

SITE SETTING & PLANT CONCERNS. The Rock Crossing Site is located just northwest of the "Rock Crossing" where the pipeline road crosses the Taylor Arroyo (see Appendix D:Figure 14). The site is a shallow depression in the prairie. In the center is a rock outcrop containing a shallow rock shelter. Water is available to the site in the Taylor Arroyo where it is backed up by a low natural dam at the rock crossing.

The vegetation of this area is typical of the short grass prairie as described earlier in this report. The area does show evidence of overgrazing. Much of the native vegetation was destroyed in a portion of this basin that served as a roundup corral or site for gathering and holding cattle. No voucher specimens were collected at this site; however, one specimen of wild gourd (Cucurbita foetidissima) was found in the area. The fruit (gourd) of this plant was thought by the tribal representatives to have some value as a container, jewelry, etc. but no one was sure of its use. No special concerns for plants at this site were expressed.

OTHER CULTURAL RESOURCES. The Rock Crossing Site was visited by representatives from the Ute Mountain Ute, Cheyenne-Arapaho, and Kiowa tribes. The small rock shelter located in the middle of a shallow natural bowl contains red paint pictographs. These led to the interpretation that the site was once used for the performance of the Cheyenne Arrow Renewal Ceremony. If the rock shelter was used as part of the ceremony, then according to the Cheyenne-Arapaho and Ute Mountain Ute representatives, the whole bowl constituted a single ceremonial site.

KEY INDIAN QUOTES. Nelson Elkriver, the Ute Mountain Ute tribal representative believes, according to signs he had observed at the Rock Crossing Site, that the site may have been the location of the Cheyenne Arrow Renewal Ceremony. Nelson Elkriver knew of the ceremony because his father was Cheyenne and a member of the Kit Fox warrior society which still performs the ceremony. Characteristics that are shared by the Rock Crossing Site and a Cheyenne Arrow Renewal Ceremony are many. These characteristics include available water, nearby hunting, a sheltered area capable of holding around 400 people, a high point to be utilized as a lookout, and a sheltered cave where pictographs could be placed for counting time and to represent other aspects of the ceremony.

Viola Hatch (V.H.), a Cheyenne-Arapaho representative, interprets the red lines found on the ceiling of a rock shelter at the site. She states that the lines were probably counting lines. She thought that the lines counted years.

R.S.- There seems to be, on the ceiling, a series of red ochre lines. There's 30 in one direction and 37 going in a different direction. The site has arrows.

It has red in...

V.H.- But they're starting from there, and they come up here --a-- it's coming from this direction it looks like here.

R.S.- What kind of time do you think we're talking about -- we're talkin' about seasons or years? Or would this have been a kinda place that people would go -- You know, almost all Indians had...

V.H.- The winter too, is always -- with us it was -- each one here was a year. (UWP field notes: 6/18/83, Tape 2, Side 1; Time 365.)

Reuben Stumblingbear, a representative of the Kiowa tribe, also interpreted the function of the red ochre lines as being lines that counted time. According to Reuben Stumblingbear, the marks counted winters. This is the same, in function, to Viola Hatch's interpretation. Both Reuben Stumblingbear and Viola Hatch regarded the red ochre marks as demarking time, by years. They both agreed that this marking process was probably utilized to keep track of time between Arrow Renewal Ceremonies.

In the following quote Nelson Elkriver discusses with Richard Stoffle possible factors supporting the interpretation that this site was indeed a spot for the Arrow Renewal Ceremony.

N.E.- And the water crossed, that's a natural dam down there.

R.S.- Yeah.

N.E.- So, If it (the Arrow Renewal Ceremony) occurred about this time they would, or earlier, they would have water here. They would have water. And the buffalo would be around here, too.

R.S.- Now -- would it just be the men in the societies camping up here?

N.E.- No, it would be -- right, somewhere in this region with the arrows would be the center -- the center place of the whole thing and the military societies would take their position. It's already predetermined where they will camp together, that military society would sit in that certain spot. I have to go back and review it, 'cause I have that, too. And that's how they camp and if a military society come out, then no one camped in that area. So there was, you know, you're talking 'bout 800's of people coming through here. And that's why it counts, the high -- the high point. If you stand up there and look around, you'll have a very clear view all 'round you.

R.S.- Now, how is this spot different than that spot that we were at yesterday with the stone circles (Sue Site)?

N.E.- This is -- this can hold more people, quite a few, and they can camp all the way around here. That little ledge will not hold 3-400 people -- 500 people. At the same time it gives enough time for a sentry here, or sentries down that way, to protect the -- in case someone comes. Because that's what they were protecting, the arrows -- being in the center.

R.S.- The arrows would be in the center of the camp?

N.E.- The arrows would be in the center. And if them --a-- sacred hat would come down and they would sit next to it. That's the difference -- different part -- in my understanding.

R.S.- And you feel that that one figure with (referring to a picture in the rock shelter) -- that's crouching down might be a -- a representative of the Kit Fox Society?

N.E.- Yeah, they're the Kit, 'cause -- all this is go back. 'Cause they don't -- they don't always live in Oklahoma.

R.S.- They gathered --

N.E.- They gathered around here somewhere. And they always sometimes -- maybe it was -- they always met at a certain area. Maybe somewhere else.

R.S.- Now, would they have had ceremonies before they came to a central gathering spot, or would this be one of the places?

N.E.- This would be one of the places here.

R.S.- Would this be a central place?

N.E.- That's why we gotten -- from here again -- stand on up, you can see it up there. If someone's coming you can tell, and they'll run out to see who it is. (UWP field notes: 6/18/83, Tape 2, Side 1; Time 455-508.)

Additional evidence that points to the Rock Crossing Site as being a possible Arrow Renewal site is the presence of a rock structure similar to a "medicine wheel." Steve Chomko (S.C.) directed the group to a feature which is located in the basin near the rock shelter. Nelson Elkriver defines a "medicine wheel" as a set of rocks specifically arranged in a circle and on which the sacred arrows rest during the ceremony.

S.C.- This is the area that I was talking about. We got all these rocks. Some of it really looks like it's been moved. And others -- you get so much rock here, it's kind of hard to say.

N.E.- You, you know it -- they probably -- because if they were hunting here, and they extended their stay -- they would start moving the rocks around.

S.C.- See, there are two of these that are -- well, like this one right here looks a line of rock --

R.S.- Yeah.

S.C.- Then there's another one.

N.E.- This could -- this very well could be where the arrows sat, you know that is why I'm gonna go to Oklahoma, 'cause they're start doing it and I wanted to see firsthand, for myself. There is -- they use the rocks -- "medicine wheel" set 'em up in certain ways and certain fashions.

R.S.- You use the word "medicine wheel," wasn't that related to time?

N.E.- Na, it was -- in a way it's related to time, and in a way to the way the -- the chief sit, you know we all -- that goes back to the "medicine wheel." And there's north pole, I mean, that there's a direction --

R.S.- Direction -- Cardinal direction?

N.E.- Yeah, and then within that there's two more circles --

R.S.- Could they use the rocks to demark that?

N.E.- Yes, demark it, so that when those chiefs walk in, they would know what -- what directions to sit appropriately. So there -- there's a -- it's very elaborate.

S.C.- They didn't do that for every site -- every camp?

N.E.- No, they would only do it when the renewal of the arrows -- that type of thing. Because, for (the) most part, the military societies for the year were never together. That's why they turned -- and that's why one of these bands got wiped out at Sand Creek. He wasn't all the Cheyenne tribe, there was only one part of it -- there's many fingers to it.

R.S.- Let me ask another question. If this is, in fact

one of those sites, what does it mean today, to the Cheyenne?

N.E.- See, that's why I'm gonna go down (to Oklahoma), it may be very important -- something -- If this is where they had gathered year after year, then it has significant -- But then it's up to the people to say that. (UWP field notes: 6/18/83, Tape 2, Side 1; Time 543-584.)

TAYLOR ARROYO ROCK SHELTERS (5LA - 5292)

SITE SETTINGS & PLANT CONCERNS. This site is located where the Taylor Arroyo begins to form the upstream portion of its canyon (see Appendix D:Figure 15). The site is formed from the low walls of the canyon which enclose Taylor Arroyo stream and an large outwash plain. The major cultural features of the site are a series of rock shelters located at the base of the canyon walls. This area was visited by representatives of three tribes, Kiowa, Cheyenne/Arapaho, and Ute Mountain Ute.

PLANT CONCERNS. The largest juniper tree (Juniperus mexicana var. monosperma) observed during the botanical visits was found growing at this site near a stream where the natural rock forms a large pool. The tree was approximately 18 inches in diameter at breast height and some 30 feet tall. Several rock shelters were located nearby. The first specimen of Indian rice grass (Oryzopsis hymenoides) was found growing near one of the shelters. Also, a considerable amount of Indian rice grass was found growing above the cliffs at this site. Rice grass was a significant seed grain for Indian people.

Because of the site's transitional position between the drier plains upstream and the deep narrow canyons downstream, it was decided to collect a plant species list for the flood plain portion of this site. The following is a list of the 28 species identified by Ivo Lindauer.

Juniper	<u>Juniperus mexicana</u> var. <u>monosperma</u>
Russian thistle	<u>Salsola kali</u>
Salt grass	<u>Distichlis strictia</u>
Yellow clover	<u>Melilotus officinalis</u>
Gaura	<u>Gaura</u> sp.
Globe mallow	<u>Sphaeralcea coccinea</u>
Cocklebur	<u>Xanthium strumarium</u>
Verbena	<u>Abronia fragrans</u>

Rabbit brush	<u>Chrysothamnus nauseosus</u>
Bull-thistle	<u>Cirsium undulatum</u>
Mountain mahogany	<u>Cercocarpus montanus</u>
Wild licorice	<u>Glycyrrhiza lepidota</u>
Sunflower	<u>Helianthus annuus</u>
Foxtail	<u>Hordeum jubatum</u>
Western wheat grass	<u>Agropyron smithii</u>
Canadian rye grass	<u>Elymus canadences</u>
Stick seed	<u>Lappula sp.</u>
Red three on	<u>Aristida longiseta</u>
Grama grass	<u>Bouteloua gracilis</u>
Alkali saccaton	<u>Sporobolus airoides</u>
Snake weed	<u>Gutierrezia sarothrae</u>
Indian rice grass	<u>Oryzopsis hymenoides</u>
Vine mesquite	<u>Panicum obtusium</u>
Galetta grass	<u>Hilaria jamesii</u>
White daisy	<u>Melampodium cinereum</u>
Yucca	<u>Yucca glauca</u>
Stink horn mushroom	<u>Mutinus caninus</u>
Prickly pear	<u>Opuntia polyantha</u>

It is interesting to note the intermixing of what is usually considered major Indian food plants and intrusive European plants which are usually associated with overgrazing of cattle or sheep. This is so often the pattern of plant assemblages where former areas dominated by Indian food plants are overgrazed.

OTHER INDIAN CONCERNS. Concern was expressed that the various rock shelters containing Indian artifacts and perhaps other aspects of material culture be protected.

BIG WATER ARROYO GARDENS - (NO SITE NUMBER)

SITE SETTING. It is located at a narrow portion of the Big

Water Arroyo canyon just before it joins the Taylor Arroyo canyon system (see Appendix D:Figure 15). Here, the canyon and stream combine to provide an ideal microenvironment for Native American food plants. Representatives from three tribes, Cheyenne/Arapaho, Kiowa, and Ute Mountain Ute, visited this site. Indian interpretations suggest that such "gardens" were deliberately planned to be close to a major camping site, like the Sue Site. With such a relationship to other sites, the gardens primarily would be used for the growing, processing, and storage of plant food. The plants within this site are quite unusual both in their occurrence and frequency.

PLANT CONCERNS. This site proved to be one of the most productive collection sites during our June ethnobotanical work. Observations began at a developed spring where the standing water was red in color, apparently having high concentration of iron oxides. Plant collections were made along the stream banks and on the talus slopes up to the bottom of the canyon wall. Collections were taken for a distance of approximately one half mile. Plant species of concern to the Indian representatives are presented with a summary of comments.

A small prairie sage (Artemisia ludoviciana) with a strong odor was identified by the Kiowa Tribe representative, Reuben Stumblingbear, as used for ceremonial purposes along with peyote (Lophophora williamsii). It was also inhaled to cleanse their souls of evil spirits, according to Reuben Stumblingbear. Elderberry (Sambucus racemosa) was found on the south facing slopes and was identified as important to the Arapaho Tribe, according to Viola Hatch. Western wheat grass (Agropyron smithii) was found along the stream banks. It was called wild wheat by Viola Hatch, and was used by the Arapaho much as domestic wheat of today is used.

Wild grape (Vitis riparia) was found in the bottom of this arroyo and on the north slope in an area naturally protected from grazing stock. This species, along with wild currants (Ribes inerme), and other food plants found in the area suggest this is one of the major traditional Indian gardens in the study area. The grapes and currants were eaten fresh or dried with flour for winter pudding. They were often pounded into patties, dried, and stored for use when needed. Wild currants were served as a dry mash or used with meat.

Giant reed grass (Phragmites communis) also called water weeds by Viola Hatch, was found at several locations. It is reported to have been used for beds and for the Sun Dance. Narrow leaf willow or stream bank willow (Salix interior) was found at several locations along this stream. This small stemmed willow was used for making shelters, back rests, and a yard fence around the tepees. Narrowleaf cattail (Typha angustifolia) was found near one of the pooling areas of this arroyo. The roots and soft portions at the base of this plant were cooked and eaten as vegetables. Rabbit brush (Chrysothamhus nausyosus) and salt brush (Atriplex canescens) were found scattered throughout the

area. Rabbit brush leaves and flowers were collected, boiled and used for a tea, but no other use of the fruits and leaves was known. The woody portion of both plants was used for fuel.

Other woody plants of the area used for fuel are: cottonwood (Populus sargentii) sage (Artemesia spp.) tomatillo (Lycium pallidum), snakewood (Gutierrezia sarothrae), and hop tree (Pteleu baldwini).

Other plants that were collected were known to have a variety of uses by Indian people. Brickillia (Brickillia grandiflora) was used as a perfume. The cottonwood (Populus sargentii) leaves were thought to be used for dressing wounds. Some species collected had uses that were not specified. They are tobacco-curley dock (Rumex crispus), clover (Medicago sp.), red four o'clock (Mirabilis multiflora) and blue grama grass (Bouteloua gracilis).

PLAYA LAKE (NO SITE NUMBER)

SITE SETTING & PLANT CONCERNS. This prairie depression is located about two miles northeast of the main canyon portion of Taylor Arroyo (see Appendix D:Figure 16). The site is a playa lake, which today is internally drained with alkali soils. During the last glacial period, however, such sites were wet and fertile oases that provided excellent habitats for plants and animals and so attracted Indian people.

The site is covered with grasses, except in its central portion. It is representative of the lowlands of the short grass prairie. Western wheat grass (Agropyron smithii) was one of the more common species observed. Additional species associated with similar sites are salt grass (Distichlis stricta), alkali saccaton (Sporobolus airoides), foxtail (Hordeum jubatum), lambsquarter (Chenopodium leptophyllum), Rocky Mountain bee plant (Cleome serrulata), and gum weed (Grindelia squarrosa). The Indian representatives expressed no concerns for the plants of this site. No collections were made.

OTHER CULTURAL CONCERNS. This site was visited by the representatives of three tribes, Kiowa, Ute Mountain Utes, Cheyenne/Arapaho. Although the site may have been occupied by Indian people thousands of years ago, no plants, artifacts, or other cultural resources of concern to these Indian people were observed.

FUZZY CANYON (5LA - 5563)

SITE SETTINGS. The Fuzzy Canyon site was visited by Ray Niedo (R.N.) and June Sovo (J.S.), the Comanche representatives. It is a shallow side canyon, located on the north side of Taylor

Arroyo just up stream from the junction with the Purgatoire River (see Appendix D:Figure 16 and See Plates 24 - 29).

CULTURAL CONCERNS. At the caprock rim of Fuzzy Canyon is a series of small rock shelters. Most, if not all, are too small to be living areas. It was suggested by Ray Niedo that the shelters were probably used for burials. A number of the rock shelters contain unnatural piles of rocks such as those placed over burials by Comanche and Ute peoples (See Plates 24 and 25). Such a canyon as the Fuzzy is ideally suited for burials because it lacks the food producing potential of the Big Water Arroyo, the hunting potential of the Kill Site, and the large ceremonial potential of the Rock Crossing Site. Yet it is close to a major encampment area; the Sue Site.

KEY INDIAN QUOTES. The following is an excerpt from the Comanche visit in which the Comanche representatives discuss burials and the mitigation of possible effects of the Fort Carson maneuver area on such burials: also participating in the discussion is a Denver University archaeologist (D.U.A.) who took her day off to show us the site, Richard Stoffle (R.S.) and Pamela Bunte (P.B.).

R.S.- What do you want to do about it if a Comanche burial is found?

R.N.- Well, we want it preserved!

R.S.- How do you do that?

P.B.- How do you recognize it?

R.N.- Well -- they pile rocks on 'em. They wrap them up -- and they pile rocks on 'em. And if it's way out on the prairie or out in the open, they build a platform, you know. (pause) You know, they was dead -- they just wrapped 'em up -- and they'd throw rocks on 'em and, you know, keep them coyotes from carrying his remains off, you know.

R.N.- That's the way they bury.

J.S.- Or if they found a -- crack.

R.S.- What if the Army does uncover something like that? What do you think the Comanche tribe would want done? In the first place?

R.N.- Well, they'd want it preserved and -- you know.

R.S.- Left in place?

R.N.- Just -- left -- just left alone, you know. 'Cause it's none of their business. Just because they -- the



Plate 24. Fuzzy Canyon from south rim of canyon looking upstream towards northwest. Lark rock shelter is in center of wash with small rock shelters along canyon sidewalls.



Plate 25. Fuzzy Canyon contains a series of very small rock shelters, some of which contain piles of stone suggesting burials.

United States give them the part of the territory that's no -- no sign it belongs to them. So, I'd say for them to keep their hands off of it. I mean that -- that's the way I think, you know, and I think the white man would do the same thing, you know. Just kinda keep their hands off of it.

R.S.- So what happens if they do find something out in the flats that's gonna be out in the middle of the maneuver area?

R.N.- Well, they probably wouldn't say anything about it.

D.U.A.- The Army?

R.N.- The Army wouldn't say anything about it.

R.S.- Well, if they're running through over it and stuff...

D.U.A.- That might be one reason we need to look for it too.

R.N.- That's what I say. If they see a body--well they...

R.S.- What happens, religiously, if a burial is disturbed? Is the spirit disturbed?

R.N.- Well, that's what the old people claim, you know. They -- they just bury their dead, their spirits.

R.S.- Can you have a ceremony to rebury them and settle the spirit again?

R.N.- That's the way they usually do, you know. You know when they was movin' them cemeteries over there, when Fort Sill took over the--western part of the, of that a -- Fort Sill? Fort Sill cemeteries that they had to move, you know, and they went out there and the old Indians, they prayed over them and then -- they give them the good sign to move 'em.

P.B.- If it's on the plain out there where they're gonna have troops and tanks goin' over, would it be better, if the archaeologists found something that looked like a burial, to check to see if it was a burial, then contact the Comanches and ask them if it should be reburied rather than let it just stay out there where it might get -- destroyed by a tank.

R.N.- Well, like I said. If they found somethin' like that and -- I imagine the Comanches'd do right about havin' it removed and buried somewhere else where, you

know, where the tanks wouldn't, you know, disturb it. Well, of course -- the Army, you know, they, they don't, they don't care.

R.S.- Yeah but that's why...

R.N.- Even though they're human beings, you know, they just -- but when they come out of the Army, and they go home, and return to their, their property or things like that, they gonna use that term: "God damn son-of-a-bitch! Look what they, look what somebody done to my property! What's gonna be done about it?" He never thought about it when he was in the Army doin' that. You know what I'm talkin' about? That's the very phrase that that person is gonna use. And he's gonna lower the boom on the guy that -- even though he didn't know who done it. See?

R.S.- But we hope to have some very specific recommendations at the end of our report which the Army would then have to follow if these are found.

R.N.- Our tribe would appreciate it if they was to respect things like that (burials) on our side, you know. We would -- really would be overjoyed if they did, you know. (UWP field notes: 9/17/83, Tape 18, Sides 1 & 2; Time 064-639.)

The Fuzzy Canyon Site is considered as extremely sensitive. It should be emphasized here that disturbed burials do have a significant negative impact on the older members of the tribe involved. If any ground breaking activity is to occur in this area, potentially impacted tribes should be contacted and further mitigation procedures should be discussed.

Where the intermittant stream of Fuzzy Canyon passes over a resistant rock formation, it has formed a large cave. On the ceiling of this cave are numerous red and black pictographs. It appears that the cave has become wetter in recent years causing the surface on which some of the paintings were made to come off. Ray Niedo and June Sovo provided interpretation of the various pictographs: It is suggested that the source of the additional water coming into the cave is a dam has been placed just above the cave by cattlemen in the area.

Specifically, in regard to the red and black markings on the ceiling, Ray Niedo had this interpretation (See Plates 26 - 29):

D.U.A. - And those marked days?

R.N.- Yah, these red ones, traveled during the day. Anyway, this here looks like a race -- into Willows Peak. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 235.)



Plate 26. Inside of big rock shelter in Fuzzy Canyon looking at southwestern end of cave.



Plate 27. Northeast side of big rock shelter in Fuzzy Canyon with Pamela Bunte; Comanche OTCR, June Sova; Comanche elder, Racy Nieto; and DU archaeologist, Mary Harnett, looking at ceiling.



Plate 28. Ray Nieto explaining the red and black pictographs in Fuzzy Canyon's big rock shelter.

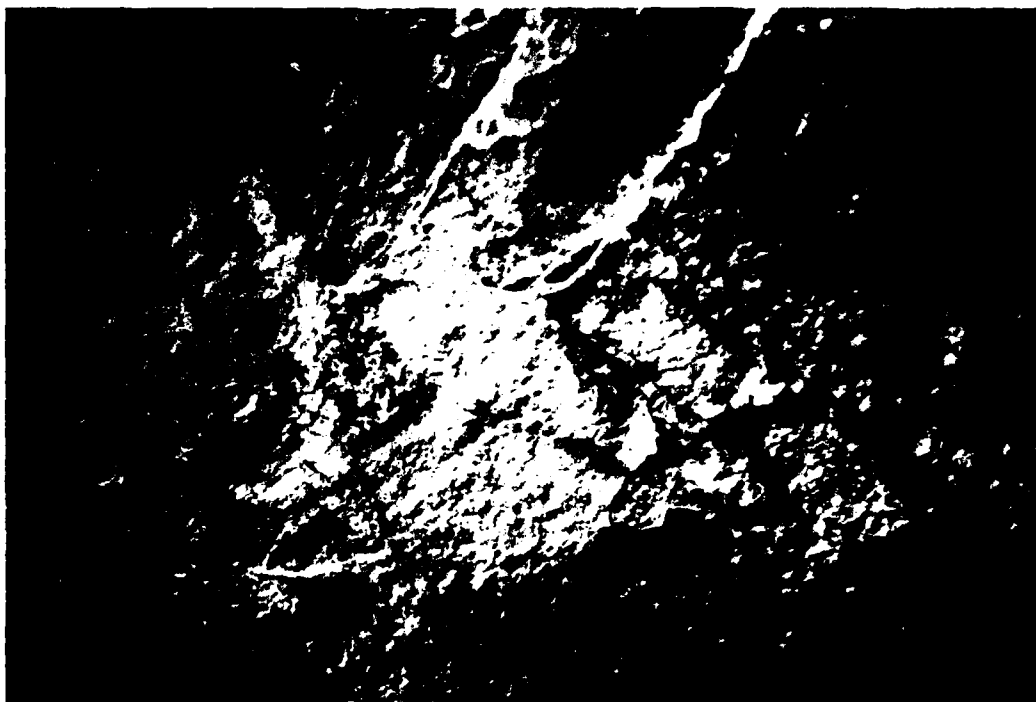


Plate 29. Portions of red and black pictographs in big rock shelter of Fuzzy Canyon.

In the following excerpt interpretations for triangle-shaped and pointed pictographs were given by the Comanche representatives.

R.N.- See that -- with them peaks there, like towers you know. They're pointed. They're not -- they're not mountain peaks, they're towers.

J.S.- Yah! Here they are.

P.B.- Now, what are these? These are different, aren't they?

R.N.- Yah, they're towers.

P.B.- Towers. What kind of -- towers would they be?

R.N.- Well, they come through some canyons somewheres that there were some towers, you know, peaks.

P.B.- O. K. At the edge of canyons.

J.S.- Could this be -- maybe, these are -- real tall peaks...

R.N.- Well, they're traveling on a -- river or a creek. That's where it forks. (pause) And then they come -- they camp somewheres up in here. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 291.)

J.S.- Say, looks like a peak and that black mark down that way -- could that maybe show the shadow? Maybe pointing a certain time of day, pointing out a certain...

R.N.- Certain direction.

J.S.- Certain place or certain point? Say, at a certain time of day those points point out some significant -- area...

P.B.- June's talking about the ones that look like little triangles -- with that long -- you know -- long line coming out the top of it. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 320.)

Some of the pictographs, perhaps all of them, could be interpreted as messages. In another part of the cave, Ray Niedo describes some more of this interpretation:

R.N.- These look -- see, there are more markings. Most Indians travel at night, you know?

J.S.- Wonder what this big one represents there.

R.N.- That's your -- that's your tipi.

J.S.- That one?

R.N.- Yup, yup. That's -- they camped somewhere around in this territory. (pause) There's some more right here. (pause) Right here is where they go in one direction so -- so they must took this direction, see? They come in through here and then they come out this-a-way.

P.B.- Now, what-what is this here?

R.N.- Their tracks -- horse tracks, there. (pause) So they definitely -- left the signs for somebody! (UWP field notes: 9/17/83, Tape 18, Side 1; Time 255.)

P.B.- Ray, would people have-just come in and left messages for people on top?

R.N.- Yah.

P.B.- Here -- so, each of these could have been a different message...

R.N.- But the rest of it just fell, you know.

P.B.- Yeah, lost a lot of it here. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 369.)

LOCKWOOD CANYON STAGE STOP (5LA - 5454)

SITE SETTING. This site was visited by the Comanche representatives. It is located at the head of Lockwood Canyon. It contains petroglyphs, food plants, gardens, rock shelters, and living site materials (see Appendix D:Figure 17). Because this site duplicates the many of the types of cultural features found to the south, it may be a northern extension of a large occupation complex or it may be a completely separate occupation complex. In either event, according to our Comanche representatives, it would have needed its own lookout points. Such high points are located to the north near the Collecting Site (5LA - 5336) and to the east at Jack's Point. If it is a part of a separate occupation complex, it would need its own location for burials. If part of the southern occupational complex, a common location like Fuzzy Canyon (5LA - 5563) is likely (See Plates 30 - 35).

PLANT CONCERNS. There were a number of plants found at the Lockwood Stage Site for which the Comanche elder had concerns. The variety of plant types included 100+ year old cottonwoods, tamarisk and cattails. Vegetation in the area is well mixed. Down by the stage stop, are 90 to 100 fire hearths according to

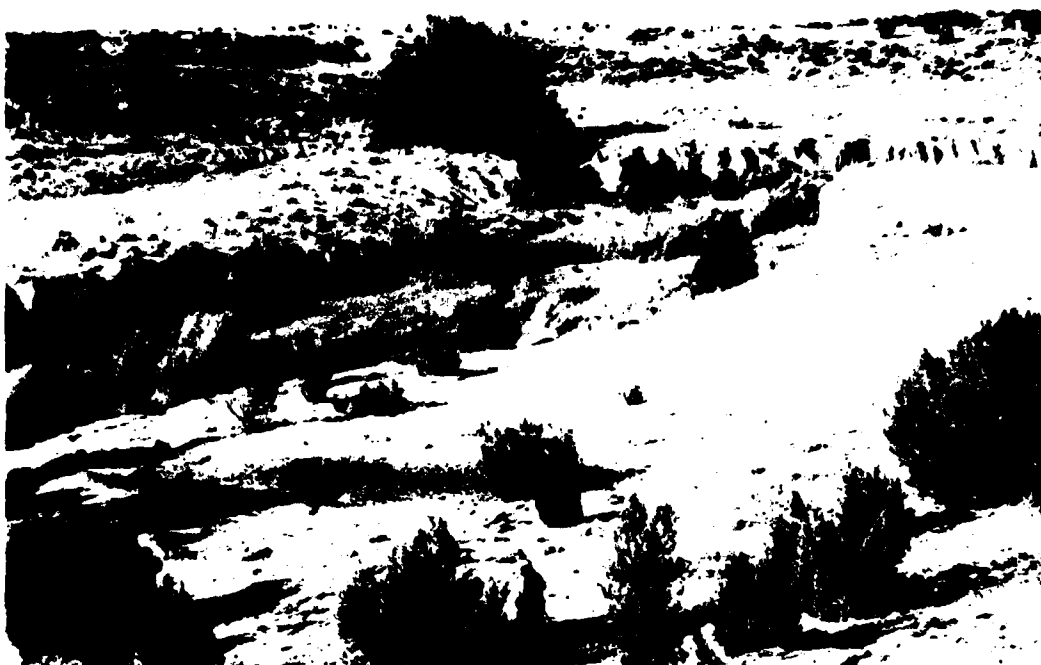


Plate 30. Lockwood Canyon, looking north, with historic stage stop located just to right of trucks. Note large cottonwoods in wash with pinon and junipers on bench and flats above canyon.



Plate 31. Ray Nieto, Comanche elder and June Sovo, Comanche OTCR, walking along bench of the east side of Lockwood Arroyo.



Plate 32. Ray Nieto explaining the narrow grooves in the sandstone walls of Lockwood Arroyo.



Plate 33. Closeup of sandstone grooves made to sharpen wood and bone according to Comanche elder, Ray Nieto.

D. U. Archaeologists.

CULTURAL CONCERNS & KEY INDIAN QUOTES. The site partly proceeded from the Stage Stop, across the Lockwood Arroyo to the South. It then proceeded along the southern edge of the arroyo near the canyon walls. At the base of these walls were grooves. Ray Nieto discusses with Pam Bunte the use of bone tipped arrows that would be associated with such grooves in the soft sandstone walls (See Plates 32 and 33):

P.B.- Put bone tips on arrows?

R.N.- When it goes in a person -- when they try to pull it out, it'll break. More or less what they use that (referring to the sandstone grooves) for, you know.

P.B.- To sharpen the bone? So, they go in easily, then break off. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 615.)

Ray Nieto pointed out another place in the sandstone walls that may have been an occupation shelter, tool processing site or both. Ray indicates where bone arrow tips may have been sharpened:

P.B.- There's a little -- I don't know what you call it -- a cave.

R.N.- It was used as a shelter.

P.B.- Was it really used as a shelter, you think?

D.U.A.- Well, I imagine it probably was at one time. Looks to be a little deposition on it.

P.B.- Yeah, as if it had been dug out a little. And the top of it which comes down to, right now, only about a foot and a half from the ground. There's places on it that looked (like) they were used for sharpening tools, bone tools that Ray mentioned that they were using for arrowheads. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 637.)

There were several food plants of interest to the Comanches. On one terrace were found wild grapes.

R.S.- Can you eat 'em?

R.N.- You better believe it.

P.B.- Taste like grapes.

R.N.- There's big bushes up there. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 027.)



Plate 34. Lush vegetation of Lockwood Canyon is discussed by Ray Niedo and DU archaeologist/botanist.



Plate 35. June Sovo inspects hand stone apparently used to process plants in Lockwood Canyon.

The Comanche representatives were concerned about plants that were used for medicinal and ceremonial purposes. Ray Nieto discusses the ceremonial uses of cattails and cockleburs by the Comanche (See Plates 34 and 35):

P.B.- Ray just mentioned those cattails but bigger ones?

R.N.- Taller, much taller.

P.B.- Used in the Sun Dance to lie down on. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 421.)

P.B.- K-u-t-s-u-p-u-k-a and that's cockleburs, and there's some old guy that used cockleburs as medicine to get power, instead of the fossils. (pause) It was used for people who were sick with TB (tuberculosis) too?

R.N.- Yes, they pound it up and boil it. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 037.)

A possible food processing site observed by Ray Nieto is discussed by Pam Bunte. The site is on the top of a nearby hill, where caprock is exposed and bedrock mortars have formed.

P.B.- Anyway, these bedrock mortars, this slab here sitting right in the middle, between four berry bushes was -- Ray's comment was (that) it was probably used to grind up the berries and that makes perfect sense. Especially this one mortar that's deeper than the others and you'd get the juice there, too. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 503.)

JACK'S POINT (NO SITE NUMBER)

SITE SETTING. This is one of the highest points (elevation 5272 feet) visited during the field study (see Appendix D:Figure 18). The location is called by local ranchers High Point. It is a portion of canyon wall that projects out into the Purgatoire River canyon system just southwest of and overlooking the junction of Red Rock Canyon and the Purgatoire River. The site was visited by representatives of five of the Indian tribes.

PLANT CONCERNS. The Indian representatives did not identify any plants of special concern. Only one voucher specimen, tomatillo (Lycium pallidum), was collected. This is an uncommon shrub for southeastern Colorado. Also an uncommon small yucca (Yucca sp.) was found growing in a dense stand, covering one hundred percent of the soil surface over an area approximately one half acre in size. According to our project botanist, Ivo Lindauer (1984:10), this location should be examined further for the presence of any rare and endangered species of plants.

OTHER CULTURAL CONCERNS. Because of the point's unobstructed view in all directions, Indian representatives suggest it may have served two functions. It may have been an isolated point for young Indian males to go for a vision quest. It may have been a lookout point to help protect camps to the east or south. While a few scattered lithic materials and a few Indian plants were recorded, the cultural significance of the site lies in lookout protection for other sites and/or spiritual isolation.

COLLECTING AND PROCESSING SITE (5LA - 5336)

SITE SETTING AND PLANT CONCERNS. This site was visited by the Comanche tribal representatives (see Appendix D:Figure 19). The site is important for its rich variety of food plants. Unlike the gardens found at the heads of the canyons, these are upland plants like grasses, and juniper and pine trees. It is likely that food processing occurred at this site. Although the site's importance derives from the great variety of Indian plant growing here, the site was visited in September when most of the plants were dry and therefore unidentifiable.

KEY INDIAN QUOTES. The Comanche tribal representatives discussed plant uses with Pam Bunte and a D.U. archaeologist. The Comanche representatives identified a large number of food plants; among them was an asparagus-type plant.

R.N.- This is a food. You know, in early spring this carries -- what do you call that --a-- asparagus -- it's almost the same thing. It's tender -- you -- cook it just like asparagus. It's along a shoot - its almost -- yeah.

R.S.- This is one of the most useful plants. 'Course everybody sort of knows that, but we're just finding out new things.

J.S.- Yeah, I never knew about the shoot thing.

R.S.- Yah, they shoot -- early.

J.S.- We knew the roots and...

R.S.- So it fits in a number of seasons. And this is porridge country here. And that's good storable material. And now's the time to gather it.

R.N.- Right here -- the seed.

R.S.- And then they'd come out here and bag it. So they might come to this site two or three times a year...

D.U.A.- Yeah, we need to process...

R.N.- That's a -- that's good for kidneys. See?

P.B.- How would you eat that?

R.N.- You boil them -- boil it.

R.S.- Boil it.

R.N.- Yah, you know, in the stream. (UWP field notes: 9/17/83, Tape 17, Side 1; Time 433.)

Another food plant that the Comanche elders identified was a species of rice grass (Oryzopsis hymenoides) that was managed by Native Americans. It had to be managed in order to grow the grass in sufficient amounts so as to make it an economically viable crop.

R.S.- You gotta have a beater and a basket and you've got to go through a field of 'em. And one of the things see, you'd have to manage these. See, it's been overgrazed, but Indian people will manage --a-- will manage a field of this. Burn it off properly, protect it, keep other things out of it. And this is very good for burning. Burning will bring this back according to the D.U.A.

R.N.- Yeah.

R.S.- And they'll -- then they -- but they have to have lots of this...

P.B.- To make it economically worthwhile.

R.S.- And this is part of the Indian change in the environment, and --a-- where it...

D.U.A.- There's acres of it. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 095.)

Rice grass was also used, according to the Comanche elders, to make rope. The species that the Comanche representatives point out was pinon rice grass:

P.B.- He's looking at a thing of pinon rice grass right now.

R.N.- Some of us make rope out of that.

D.U.A.- Rope?

R.N.- Um hum. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 085.)

Besides the rice grass, the Comanche representatives pointed out the plant that the Comanche used to make a tea:

D.U.A.- Mirabilis.

P.B.- O.K. we have some mirabilis here which was used for--

R.N.- Indian tea.

P.B.- As a kind of Indian tea.

R.N.- Indian tea.

(Pause while they take a picture of the mirabilis)

R.S.- Would you take it green and dry it or would you...

R.N.- Well, it'll dry out.

P.B.- He said you could do it either way. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 154.)

There are many berry producing plants that can be found at the Collecting Site. Among these are plants that the Comanche used for a kind of lemonade.

R.N.- You mash them little berries.

P.B.- Yeah, that's good. That's kinda like a lemonade. Do you eat that for berries?

R.N.- Yeah, there's two different species of that.

P.B.- Um hum. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 200.)

Besides the many grass-like plants found at the Collecting Site, a cactus was identified by the Comanche elder as a food resource that contains a fruit. In this next excerpt, Ray Nieto discusses the black cactus:

R.N.-...black cactus.

P.B.- Black cactus. All right, we have that.

R.S.- Did they -- would they just eat it now and just eat it fresh?

R.N.- Well, it's like a plum, you know? Or you know that --a-- what do you call it? That --a-- them apples

that you -- got a bunch of little seeds in it. Them little red apples you buy in the grocery stores. That there, that's got a bunch of seeds in it. Take that and put 'em away, you know.

R.S.- Store 'em?

R.N.- Store 'em.

P.B.- Dry them?

R.N.- Well, they, you know -- they dry 'em and they mash 'em or sometimes they...

P.B.- Mash 'em up. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 277.)

Other plants identified by the Comanche representatives were plants that have a variety of uses. Cedar berries were a prime example of this type of plant; they were used for incense and as a food. The following quote illustrates this:

R.N.- This is what the Comanche used -- to shield theirselves. You know, they used it as -- what do you call it? Incense?

P.B.- Um hum. It's after you dry it in that paper bag sort of thing. Did the -- Comanches ever make like a mush out of the cedar berries or anything like that? Like -- eat it as a food?

R.N.- Well, I've heard the -- grandmas talk about it. They get those from off of the little bigger -- the one kind with the seeds in it.

P.B.- Right. The ones that have the bigger berries, right?

R.N.- Yah, they use those.

P.B.- O.K. We'll look around and see if they have any of those other kinds.

R.N.- Yeah, that's what I was -- but I know this is that one -- the one we want to use in Peyote meeting. (UWP field notes: 9/17/83, Tape 17, Side 1; Time 357.)

The yucca, which the Comanches discuss in detail also falls in the category of plants with multiple uses. According to Ray Nieto, the yucca can be used as a comb, a medicine and a soap.

R.N.- You see those --a-- sharp things over there? They use that for -- those blades of it -- they use it for comb. Make comb out of it.

D.U.A.- You mean the statico -- the spear grass?

R.N.- Right here, yeah.

P.B.- Yucca.

D.U.A.- Oh, the yucca.

R.N.- And then they use the roots for soap. Bunch 'em up enough-bunch 'em up -- and leave them without -- they cut these green sharp things off of it and they wrap that up and use it for colds.

P.B.- You've got to be careful. Don't you even take these green threads off of the outside because they can cut you also?

R.N.- Mm hum. Yup.

D.U.A.- Don't they use it for any sort of weaving?

P.B.- Paiutes do.

R.N.- Paiutes do, but I never hearda them old Indians sayin' anything about that but they use it for comb and they use it for soap -- yah.

J.S.- I've used it for soap once in a while. (UWP field notes: 9/17/83, Tape 17. Side 1; Time 370.)

In the next excerpt, Ray Niedo relates to Pam Bunte the use of cedar as a medicine to be used for stroke victims. The Comanche use the smoke from burning the cedar. They fan the smoke so the distressed party can inhale it:

R.N.- That's what the cedar you use, you know, when you get -- stroke.

P.B.- Um hum. How do they do it with the cedar?

R.N.- They put the cedar on fire and then they drop some of this when it's dry, you know.

P.B.- Uh huh. So like if they took a cedar branch and just put it right on the fire, in the ashes, and they drop some of that on...

R.N.- Yeah.

P.B.- And how do they give it to the person?

R.N.- Well, they just --a-- eagle feather, a fan.

P.B.- Oh, the smoke.

R.N.- Yeah. An' pray and then fan you with it. See?

P.B.- Good bunch of it here.

R.N.- Um hum. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 002.)

In the last chapter it will be recommended that permanent access to the area be granted to organized groups of Native Americans to enable them to gather cedar and other unusual and rare plants found at the site. The following quote illustrates the limited availability of certain plant types to the Comanche:

R.S.- And this cedar is a special kind of plant. That's that cedar with the little red berries, right?

R.N.- Yeah, yeah.

J.S.- And that sap out of a -- pine -- What kind of pine tree was that?

R.N.- That was a pinon pine.

R.S.- Pinon.

R.S.- And, then, now you were saying that down there in Oklahoma -- that's a -- that's hard to get that.

J.S.- Yah, that's true.

R.N.- Well -- a -- the eastern part of Oklahoma has -- that's a long ways to go to get it too, you know what I mean?

R.S.- Yah, and is it as good?

R.N.- Well -- it aint as plentiful as it is here, you know what I mean?

R.S.- So it would be easier to come to the spot where there was lots of it...

R.N.- Yah.

R.S.-... being preserved as a stand or something -- and then people can get it. (UWP field notes: 9/17/83, Tape 18, Side 1; Time 133.)

The Comanche elders discussed witchcraft with Pam Bunte, Ivo Lindauer (I.L.) project botanist, and Richard Stoffle when they came upon some fossils at the Collecting Site. What follows is discussion of religious power and of how Comanches achieved this power through the use of fossils.

R.N.- Speakin' of --a-- what do you call it -- where

they -- people use witchery?

R.N.- You know some o' them Indians used ta get their power from these seeds.

P.B.- From the fossils?

R.N.- Um hum. They even get 'em from this garfish.

R.N.- There's some Indians that had that power go way down in the bottom of the creek or lake. They just lay down and go to sleep. Like these fossils, like these shells. See?

R.N.- Close and open.

I.L.- The formations has quite a few shells in it.

R.N.- Yeah.

R.S.- Do --a-- Comanche people do this to get their power?

R.N.- Yup.

R.S.- From those?

R.N.- Um hum.

P.B.- Now, could they get it at a place like this or have to be in a river or a creek?

R.N.- Well --a-- see the way they go about it, they come out of the hills like this or they go up on top of that (nearby high butte) and they sleep up there -- there for three, four days without water. They fast an' they pray. Whatever these kinds are, well, they'll come up to them in a dream or a vision. And they tell them how to go about it 'n then they --a-- they get their power. They know how to handle it. They know how to control it. Well, other guys now, well that's "Bedico" you know, he's a prince and a power o' the air. You just reach up and get it by just asking for it. You know? That's where the young people get that now.

P.B.- They don't use the fossils?

R.N.- No. Naw, them old people, they go up here on a hill like this and sleep up there for three or four days without drinkin' or eatin'. And that sage that we come by here, they use that for mattress, you know. Lay on it. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 016.)

Shortly after this conversation concerning fossil use, Ray Nieto discussed the differences in different fossils; how some are used for some things and some for other things.

R.S.- Are there fossils that are particularly important or are all areas equally important...?

R.N.- Well, there's some of 'em, you know, some of 'em have different --a-- kinda power, you know?

R.S.- The different kinds of fossils?

R.N.- Yeah, an' different kind of fossil power (pause).
(UWP field notes: 9/17/83, Tape 17, Side 2; Time 065.)

In the field notes it is mentioned that there are many shell-like fossils in rock outcrops at the Collecting Site.

Immediately to the north of the Collecting site is a high butte. This site was not visited by the Comanche representatives, but they noted that, with numbers of Indians down collecting plants, the high butte would have been an essential lookout. Ray Nieto noted that it would have been an good spot for a vision quest, as it was both high and remote enough. The Comanches also pointed out that such a high point would also be used as a point of reference for defining location.

R.S.- Gathered seeds and, grass seeds and all of this and spent long times here, wouldn't there be somebody on that high point lookin' out?

R.N.- They got to be. You see, they part of the wild, you know, they're just like a deer or an antelope, they all got -- they get a lookout. You know? So...

R.S.- Somebody had to sit up there and there should be high point association...

R.N.- And they -- and they use that for directions too, you know, high point. Yeah, they travel by the high point just like --a-- these navigators, you know. Airplanes use the high point.

I.L.- Helicopter pilots use it...

R.N.- Yeah?

R.S.- Now would -- I wanna ask -- you were talking about men that would go out and fast for three days and they would need a place. Wouldn't that be also a kinda place where...?

R.N.- Yeah, that would be a likely place.

R.S.- Is it possible? Is it high enough? Isolated enough?

R.N.- Yup. No, they're -- they don't like to be bothered when they're doin' that, you know, when they're fasting. They want to be all together by the top up there. Even the spirits. (UWP field notes: 9/17/83, Tape 17, Side 2; Time 169.)

This high butte cannot be fully interpreted until other appropriate Indian tribal representatives visit this possible vision quest site.

OCCUPATIONAL COMPLEX MODEL:

AN INDIAN FRAME OF ANALYSIS

One of the most important ideas that emerged from the Pinon Canyon Maneuver Area on site visits has to do with the way these Indian people analyze sites. That is, the way they define an appropriate frame of analysis? Each of the tribal representatives began their evaluations with the question, "Of what bigger unit is this site or archaeological feature or natural element a part?" Answering such a question proved to be key in interpreting the site, feature, or element as well as assigning a cultural significance to it. In a number of instances, the Indian tribal representatives took days before the various sites, features, and elements came together into a holistic perspective of the area. During the on site visits, Indian representatives commented in terms of working hypotheses about the uses of sites, features, and elements. They developed these hypotheses from known information and from culturally derived logic. In most cases, the broader interpretative frame did not become clear until a number of sites were visited and the person was able to stand on a high point.

In every case, the Indian representative tried to discern the broadest cultural meaning of the site, feature, or natural element. We are using the technical term "occupational complex" to refer to this broad frame of reference or model within which each of the sites, features, and elements can be interpreted and evaluated from an Indian perspective. The occupational complex model assumes that the distance from a central camping area and the functional interrelationship between sites, resources, and natural elements are key variables. Further, the model assumes that traditionally Indian people utilizing the study area developed a broad area resource use plan that would cause one locale to be chosen as a kind of occupation site, such as a winter camp or fall gathering or hunting camp, while another locale with similar but not identical characteristics would not be chosen.

An important variable within the occupational complex model

is the evaluation of labor efficiency. The Purgatoire riverine oasis was an ideal locale for combining multiple social and subsistence functions within a culturally defined "reasonable travel distance" from a major camping area. The locale provided a great variety of game for hunting and topographic features for animal drives and kill sites. A great diversity of food plants existed naturally or could be encouraged in the uplands, side canyons, and river bottom. Cottonwood trees and shrubs located in the main canyon provided browse for horses and firewood during winter encampments. Large shallow bowl-shaped areas permitted large encampments to form for brief periods while ceremonies were conducted. High points provided lookout opportunities as well as places for seeking vision quests. The combination of natural topographic features and a rich subsistence base probably caused Indian groups to remain for long periods while the hunting, collecting, and processing of foodstuffs was being accomplished. During this time, important sacred and secular ceremonies could be conducted.

The occupational complex model also contains the understanding that one type of site, feature, or element in a particular locale may have different functions depending upon its placement in association with other types of sites, features, or elements. For example, a big game kill site on the High Plains is unlikely to be near a permanent camp. Such kill sites would be used quickly and the people would leave. On the other hand, a kill site, like that visited by the Southern Ute representatives, that is located near a permanent camp would afford the opportunity for training young men in the procedures of driving herd animals. There, it would be more efficient to laboriously peck educational aids such as maps and diagrams into basalt boulders. Earlier in this chapter another example was provided by the Comanche Tribal representative. He noted that traditionally Comanche people had different types of burial practices for use in topographically different sites. If a person died while the group was on the High Plains, a platform would hold the body high off the ground leaving no remains afterwards. But if the person died while the group was in canyon country, such as during the winter camp, the body would be placed in an out-of-the-way shallow rock shelter or crevasse and covered with natural stone thus producing a residual burial site. Another example would be the differences in artifacts at a gathering site depending upon whether or not it was located within a culturally defined "reasonable walking distance" from a main camp. An isolated gathering site which required the plants to be processed before returning to the main camp is likely to have the full range of processing equipment found on site. During the Intermountain Power Project ethnographic studies, Southern Paiute tribal representatives took researchers to isolated gathering areas, pointed out the location of heavy grinding stones, and identified the owners of the food processing equipment (Stoffle, Dobyns, and Evans 1983:117). At collecting sites located nearer to a major camp, food can be brought back to camp where the heavy grinding materials would be kept. Other factors, such as a need for sun and/or wind during the processing of plants or animals

also can influence the location of processing sites and their associated artifacts (Stoffle, Dobyns and Evans 1983:111). These examples suggest that there is a synergistic effect produced by the interaction of sites, features, and elements within an occupational complex. Knowing this, the Indian people involved in the Pinon Canyon Maneuver Area on site visits would not interpret the sites, features, or elements of a locale without first acquiring a holistic understanding of the occupational complex.

Findings derived from the on site visits suggest the presence of at least one occupational complex in the study area. It is centered on the Sue Site as the main camping area. The Hogback may have served hunting and lookout functions, and probably defined the southern boundary of the occupational complex. Plants were collected in the uplands at the Collecting Site and at the heads of canyons like Big Water Gardens. Horticulture is suggested as a possibility in the Purgatoire River bottom. Burials may have been concentrated nearby in an isolated but otherwise marginally useful area like Fuzzy Canyon. The northern boundary of the occupational complex may have been the wide flats north of Taylor Arroyo. It may be still farther to the north above Lockwood Canyon. In any event, the occupational complex model seems to best describe the frame of analysis used by these Indian people to understand what they observed in the study area.

TRANSLATING AN INDIAN MODEL

INTO AN ARCHAEOLOGICAL PARADIGM

The archaeological paradigm that is conceptually and methodologically closest to the Native American interpretative model termed the occupational complex is called Spatial Analysis (Clarke 1972, 1977). Within this paradigm, Clarke includes research on the meanings of spatial relationships between sites and their various elements: artifacts, archaeological features, routes and trails, resource space, and environmental resources. Spatial studies include settlement archaeology, site systems analyses, regional studies, locational analyses, catchment area studies, ethnoarchaeology, and distribution mapping, to name a few (Clarke 1972:47).

Clarke (1977:9) formally defines spatial archaeology research and methods as concerned with:

the retrieval of information from archaeological spatial relationships and the study of the spatial consequences of former hominid activity patterns within and between features and structures and their articulation within sites, site systems and their environments...

The definition is deliberately broad so as to include a wide variety of archaeological studies where space is a major variable. In his discussion of the paradigm, Clarke (1977:9) also points out the important role of cultural groups in defining one space as a resource while defining a similar space as unimportant. Clarke's use of the concept "resource space" thus recognizes that resources have no inherent function or value outside of the ethnographic frame within which a people define their use and establish their meaning.

According to Clarke (1977:10) spatial analysis proceeds through a series of steps. Elements and sites are recognized and mapped. The professional training and experience of the archaeologist permits him or her to appraise the patterns with a "swift intuitive glance," and to form initial working hypotheses regarding the spatial structure of the system. This is a methodological procedure that is comparable to that utilized by the Native American representatives during their short on site visitations. These working hypotheses, according to Clarke, then provide the guidance for further descriptive research and explanatory analysis of the sites, features, and elements within the study area. This final step in the spatial analysis of sites has been recommended (Stoffle 1983) but funding has not yet been provided. The present analysis, therefore, rests on those working hypotheses that Indian people could provide based on their visits to portions of the study area.

Spatial analysis can be conducted at a number of levels of abstraction. Clarke (1977:11-15) defines three levels of spatial analysis: (1) micro, (2) semi-micro, and (3) macro. Micro level analyses is limited to the spatial associations of elements found within or proximal to structures such as houses, rooms, graves, or shrines. Usually such small scale units of analysis are called "sites" by archaeologists and are assigned a discrete "site number." During the on site visits, Native Americans often failed to make specific comments when they first visited one of these sites. Extensive interpretation was withheld until other sites in the Pinon Canyon Maneuver Area could be visited. Clearly, the Indian representatives found interpreting such sites to be premature before better understanding the broader context within which any specific site, feature, or element occurred.

The semi-micro level of analysis is concerned with the interrelationship of structures and elements within a site. It is common archaeological practice to assign a site number to discrete archaeological units even though they may be near to one another. Thus a rock shelter, a camping area, and bedrock mortars located within a few hundred yards of one another in a narrow canyon may be assigned three site numbers. When asked to interpret such an array of sites, Native Americans representatives usually placed the "sites" into the same category and defined the consolidated unit as "the site." Interpretations regarding the broader functions of the consolidated site, however, would still be withheld until visits to other sites in the study area were made.

The micro level of spatial analysis is comparable to that utilized by the Native American representatives during their on site visits in the Pinon Canyon Maneuver Area. At this level the frame of analysis is broadened to include potentially interrelated sets of sites and elements in a locale (Clarke 1977:13-15). For example, Flannery (1976:91-95, 103-117) utilized the "catchment area model," to refer to the zone of resources, both wild and domestic, that occur within a reasonable walking distance of a given agricultural village in Mexico. Main camping and sedentary living areas are selected, according to this model, because of the total food production potential of an entire catchment area or basin rather than on the food production potential of the main campsite or village site itself. Catchment Area analysis (Vita-Finzi and Higgs 1970) and other "least cost" locational models of Von Thunen in 1826, Weber in 1909, and Chisholm (1968), heavily rely upon economic and geographic variables. While these variables are an aspect of the occupational complex model, it also includes the requirement of understanding the functional interrelationship of sites, features, and elements within a utilized locale. According to the occupational complex model, the value of a specific occupational site is assessed on the basis of the combination of sites and elements that are available in its locale or hinterland as well as their distance from one another. The mix of distance and sites, features, and elements has a synergistic effect that influences both the value of the occupational complex to an Indian group and how they will utilize it.

Ethnoarchaeology is a type of spatial analysis that even more closely approximates the methods and interpretive assumptions that have been utilized by the ethnographers and Indian tribal representatives during the on site field work in the Pinon Canyon Maneuver Area. Selected recent contributions to ethnoarchaeology include Binford (1978), Donnan and Clewlow, Jr. (1974), Gould (1978), Kent (1984), and Kramer (1979, 1982). These studies combine knowledge of contemporary American Indian living patterns with archaeological data so as to interpret the spatial relationships, uses, and values of sites, features, and elements that were used by the ancestors of contemporary Indian people. Most research involves the ethnoarchaeologist and/or ethnographer in making firsthand observations of Indian living patterns and then extrapolating from these patterns to archaeological data.

Kent (1984:15-18, 39) takes this ethnoarchaeology methodology two steps further. On the one hand she adds the strength of controlled comparisons by simultaneously observing an economically stratified sample of Navajo, Spanish American, and Anglo American families to see how they utilize household space and surrounding activity areas. On the other hand, she utilizes Navajo informants to interpret archaeological data from an on reservation excavation. The second approach is similar to the on site methodology used in the present study.

Typically, Indian people have been asked to take an active role in interpreting archaeological data when the archaeology sites are from the late historic period, such as Kent's work on the Navajo Indian reservation. Recently, Bunte and Franklin (1984a) have made extensive use of this ethnoarchaeological methodology in their San Juan Paiute tribal acknowledgement research. Bunte and Franklin have documented the location, occupational function, and cause for abandonment of hundreds of former San Juan Paiute living sites using the on site visitation methodology. San Juan Paiutes have taken Bunte and Franklin to living sites abandoned as much as a generation before and interpreted archaeology features as delicate as circle dance impressions and as confusing as sites where whole hogans have been moved. Such evidence has been defined as admissible in their federal tribal acknowledgement petition (Bunte and Franklin 1984b).

Indian interpretations of archaeological data that date beyond the memory of any living person must rely upon traditional information passed from generation to generation, oral narratives, and culturally-based logical interpretations. Such was the type of data used by the Indian people who provided interpretations of sites, features, and elements in the Pinon Canyon Maneuver Area. Careful triangulation with documents, archaeology, and geology has led to the conclusion that Indian and nonIndian people alike are able to make statements, that have a demonstrated scientific value, about things and events occurring before their time (De Laguna 1958, Krech 1980, Montell 1970, Opler 1940, Pendergast and Meighan 1959). Even federal courts, especially during Indian Claims Commission hearings, have permitted the use of interpretations derived from such sources (Dobyns and Euler 1970; Heizer and Kroeber 1976; Shipek 1968, 1982). On site visitation with tribal representatives is viewed as a valid, even essential methodology, for eliciting these interpretations.

The Indian people who participated in the on site visitation in the Pinon Canyon Maneuver Area were very articulate about how they were proceeding in the interpretation and evaluation of sites, features, and elements of the study area. While the term "occupational complex" has been assigned by the ethnographer, the analytical model to which it refers is clear in the minds the Indian tribal representatives. The occupational complex model, then, has been placed into an archaeological frame of reference in order to more accurately communicate the Indian frame of analysis to nonIndian people. Although it is not necessary to validate the concerns of Indian tribal representatives, comparing the Indian model, methods, and data to respected archaeological models, methods, and data does document the legal and scientific (Hayden 1984) validity of these Indian cultural perspectives.

CHAPTER VI. MITIGATION RECOMMENDATIONS

Chapters III, IV, and V have addressed the question, "What sacred cultural resources belonging to living Indian people can be found in the study area?" This chapter addresses a second question, "What can and/or should be done to mitigate those sacred resources currently identified as being potentially impacted by the Fort Carson troop and tank maneuvers and associated road and building construction?" Here the term "impact mitigation" is used, following Leistritz and Murdock (1981:17), to mean efforts to minimize those impacts on preconstruction conditions, premaneuver conditions and resources which are viewed as undesirable. The term is also used to include measures to enhance those impacts which are considered to be beneficial.

Two broad methodologies have been used in the identification of the Indian cultural resources. Ethnohistory, which is an effort to triangulate findings by using multiple data sources such as historic documents, oral history, and ethnographic descriptions, has been one method. Interviewing Indian people has been the other method. While both methods are useful, it should be emphasized that each has its limitations. No methodology or combination of methodologies known to the authors of this report, are able to find, identify, and interpret all Indian cultural features that might be present in a study area of the size and complexity of the Fort Carson Pinon Canyon Maneuver Area.

The following portions of this chapter discuss both general and site-by-site mitigation recommendations as warranted by the expressed concerns of Native American representatives and the ethnohistorical analysis. These recommendations address (1) the general procedures by which appropriate mitigation can be developed, (2) the disposition of burials that may be found during construction or any other form of groundbreaking activity, (3) the disposition of plants of special value to Native Americans, and (4) the disposition of other sacred cultural resources such as panels of petroglyphs and pictographs.

GENERAL MITIGATION RECOMMENDATIONS

The following statements address broad mitigation issues that are relevant to each of the seven Indian tribes who are a part of this research. These mitigation recommendations are based on the explicit requests of the Indian peoples and the

author's previous experiences mitigating American Indian sacred cultural resources.

PRECONSTRUCTION MITIGATION MEETING

Indian tribal governments should have a direct and explicit role in establishing mitigation recommendations for Indian cultural resources located in the study area. They can have this role in two ways: (1) by reviewing this report and making mitigation suggestions and (2) by participating in a preconstruction meeting to develop final mitigation recommendations. In the first instance, each of the seven official tribal governments has received a copy of this report and has had the opportunity to place their recommendations in this chapter. This is a procedure specified by the Council on Environmental Quality updates in 1978 for EIAs. These guidelines were cited in Chapter I of this report and built into the researcher's bid in response to the NPS's RFP for this study (Stoffle, Dobyns and Evans 1983). It is understood, however, that there are no federal, agency, or State of Colorado regulations regarding the involvement of Indian people during the mitigation phase of a Mitigation Study such as the present one. In the absence of such regulatory guidelines, it is recommended that this project take the "spirit" of the American Indian Religious Freedom Act, the clearer CEQ guidelines for Environmental Impact Assessments, and precedents from other federal agencies such as the Nevada and California offices of the Bureau of Land Management and permit the seven tribal governments to have a role in the mitigation process of this project.

Certainly there are a number of ways of directly involving the seven tribal governments in the mitigation process. One appropriate means would be a Preconstruction Mitigation Meeting. Such a meeting should occur before any roads, building, etc. are constructed and before any tank or troop maneuvers occur. Participants at the meeting should include at least the following: (1) from each of the seven tribes, an official tribal government spokesperson and a tribal cultural resource specialist, (2) one or more representatives of the United States Army with the knowledge and authority to negotiate mitigation, and (3) a representative of the National Park Service management team who would bring an in depth understanding of the full range of environmental resources that are under consideration during the mitigation phase of this project. It may or may not be appropriate to invite the participation of one or more professional cultural anthropologists who have worked with Indian people and have helped mitigate Native American sacred resources.

The agenda of this Preconstruction Mitigation Meeting should be set in advance but remain sufficiently flexible to permit new issues to arise during the discussions. Some topics appropriate for the agenda have been suggested by this research. One such topic is the mitigation of specific sites, features, and elements that were identified by the Indian people who participated in

this research. A second topic is, "How to provide the additional funding needed to take Indian people to the remainder of the study area and provide them with the opportunity to identify other sacred cultural resources?" Such funding was requested in the Interim Management Report (Stoffle 1983) but no funds have yet been provided. Additional topics for the meeting's agenda should be suggested while the meeting is being arranged. Normally, such a meeting would take two days. It should be held at a location that is considered mutually agreeable to all parties. No filming or taping of the meeting should occur without the permission of all parties.

MITIGATION OF NATIVE AMERICAN BURIALS

Native American burials are rarely identified by a Native American Impact Assessment. This is because burials often occur over a period of hundreds of years and only the most recent are remembered by a Indian people. Even when the location of a burial is known, Indian people with such knowledge often will not reveal the location for fear that the burial will be taken by nonIndian people. Normally, tribal representatives will only be able to identify places that are likely to contain burials. Such areas, then, can often be avoided. Even when some burial locations are identified and sensitive areas are known, groundbreaking activities often reveal Indian burials. For these reasons, it is necessary to begin a dialogue with each Indian tribe regarding the correct procedure to follow in case a burial belonging to that tribe is found during groundbreaking activities in the study area. Although all states have procedures that go into effect when a burial is found, these are general policy statements that may or may not involve Indian tribes in the disposition of the burials. A project like the Fort Carson Pinon Canyon Maneuver Area, however, has the advantage of being able to identify likely areas for Indian burials and of being able to talk with Indian people in order to work out procedures before a burial is found. By working out such procedures in advance of the discovery of a burial both the construction time of the project developer and the psychological stress of the Indian people are greatly reduced.

Some of the topics to be addressed by a mitigation of Indian burial agreement should include (1) criteria for identifying the ethnic group of the burial, (2) who to contact within the tribe when such an identification has been established, (3) what are the most acceptable alternatives for the disposition of the burial if it can be reburied on site, if it must be removed, or if it has been partially destroyed, and (4) the appropriate disposition and/or curation of the grave goods.

MITIGATION OF INDIAN PLANTS

Indian people have utilized plants in all aspects of their lives. Previous research by the authors revealed the critical

role such plants continue to play in the religious lives of living Indian people. For this reason the present research provided the opportunity for Indian people to express their concerns for plants that may be in the study area. The study was designed so that the field work portion occurred when plants in the study area were at their maximum physical development. In addition, a professional botanist was present in order to scientifically record the plants of concern. Although there was an expressed concern for all the Indian plants located in the study area, the Indian people understood that all of the plants could not and would not be protected. For this reason, they restricted their requests for plant protection to larger concentrations of those plants that are utilized in Indian religious ceremonies. In a few instances, rare medicinal plants were identified for protection despite not being in large numbers. Places where such concerns were expressed are listed in the following portion of this chapter. At issue in this portion of the chapter is the question, "What can be done to protect these Indian plants?"

So many of the plants in the study area are important to these Indian people, because they were relocated to reservations lands in ecological zones that did not and do not contain these traditional plants. This problem was especially troublesome for those Indian peoples who were relocated to Oklahoma. This probably was an important aspect of Indian efforts to continue to utilize this area long after removal. In fact, there was widespread plant use in the study area by the Indian people who returned to establish a community next to the study area during the Great Depression.

When Indian tribes live near a study area and have similar ecological zones as the study area, potentially impacted sacred plants can be mitigated by transplanting them to the reservation. This mitigation alternative, however, does not seem to be realistic because the Indian people live far away from the study area and in very different ecological zones. For these reasons, protecting the plants where they now are seems to be the only mitigation alternative. This alternative would require that Indian people be permitted access to these plants one or more times per year in order to gather and process the protected plants.

The current and future demand for sacred food and medicine plants by the members of these seven Indian tribes cannot be assessed by the present study. This study was charged with identifying the sacred plants located in the study area. In order to measure the potential demand for sacred plants located in the study area, it is recommended that funds be provided for research that will measure the current use levels of sacred plants such as those identified in the study area. This research would also project future sacred plant usage. There are a number of medical programs that will greatly influence the use of sacred plants by Indian people. For example, in Oklahoma there is a new program that will permit Native curers to practice medicine in

major hospitals. It is expected that this program will increase the need for native plants used in curing. Such programs raise a number of questions that could be addressed by the research and through mitigation meetings. Where will these plants come from? Where will they be stored? Will training of new Native curers require that they go to where the plants are grown as part of their training? The increasing acceptance of Native curers in the western hospital setting has placed and will continue to place increasing demands on existing stands of American Indian curing plants. Fort Carson Pinon Canyon Maneuver Area currently contains numerous stands of these sacred plants and these should be protected for the current and the future use of Native curers from the seven tribes.

SITE SPECIFIC MITIGATION

This portion of the chapter discusses some of the sites, features, and elements that were visited by Indian tribal representatives during the on site visits and some of the mitigation alternatives that should be considered. Again, it needs to be emphasized that these sites and alternatives are only based upon this research. Other suggestions from the U.S. Army, the National Park Service, and the Indian tribes themselves should be taken into consideration.

ALTERNATIVE MITIGATION ACTIONS

The following is an outline of the possible mitigation alternatives that can be considered in order to protect different types of sacred Indian cultural resources already identified in the study area. These alternatives reflect discussions with the Indian people while they were on site and mitigation alternatives that the authors have found acceptable during the mitigation of Indian sacred resources in other projects. Some alternatives may not be reasonable once the Indian people and the authors of this report are made aware of mitigation limitations currently only understood by the U.S. Army and the National Park Service. Other mitigation suggestions are welcomed.

I. PLANTS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. reduce access, e.g. fence off
- B. Move out of study area
 - 1. to just outside of the study area in Colorado
 - 2. to reservations.
 - 3. to commercial plant dealers
- C. Provide access for Indian religious practitioners

and curers

II. BURIALS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. reduce access, e.g. cover with cement
- B. Excavate and move to
 - 1. be reburied at nearby protected site
 - 2. Colorado State Indian graveyard
 - 3. move to reservation
 - 4. move to museum - scientific study

III. CEREMONIAL SITES/VISION QUEST LOCATIONS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. reduce access, e.g. close down roads
- B. Move - not considered
- C. Provide access to religious practitioners and curers

IV. LIVING/FOOD PROCESSING AREAS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. limit access
- B. Move - not considered

V. ARTIFACTS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. limit access
- B. Scientific excavation and move
 - 1. to museum
 - 2. to reservation/Cultural Resource Museum

VI. PETROGLYPH/PICTOGRAPHS

- A. Protect in situ
 - 1. signage - "Keep Out"
 - 2. limit access
 - 3. protective covering, e.g. plexiglas

B. Preserve scientifically - record

C. Move - petroglyph boulders only

1. to nearby protected location
2. to museum
3. to reservation - cultural resource museum.

SITE SPECIFIC MITIGATION

This section of the chapter discusses site-by-site mitigation. For each site the full range of features or elements at a site that potentially could be mitigated are listed. Next to each cultural feature or element is an indication of whether or not there is a need for it to be mitigated. Where mitigation is needed, one or more mitigation alternatives is indicated. The general location of the site is indicated, but actual map locations in the Fort Carson Pinon Canyon Maneuver Area are only contained in the confidential Appendix D.

SUE SITE (5LA - 5255). The Sue Site is located near the lower forks of the Van Bremer Arroyo (see Appendix D:Figure 10). This site is located in a moderate sized canyon that is typical of the regional drainage that scours the prairie along the sides of the Purgatoire River.

As discussed in Chapter V, this site is viewed as being a central camping area in an "Occupational Complex" that included most of the southern portion of the study area. The Sue Site contains a diversity of unique Indian cultural resources.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	A. 1
V. ARTIFACTS	-	A. 1
VI. PETROGLYPH/PICTOGRAPHS	-	A.2, B and C.1

DEER PETROGLYPH SITE (5LA - 5496).

The Deer Petroglyph Site is located near the extreme southern end of the Hogback on a small stream that flows into Van Bremer Arroyo from the south (see Appendix D:Figure 10).

The site contains a series of petroglyphs that are pecked onto the side walls of a small arroyo and a panel of red pictographs. The site is so named because of a clear petroglyph of a deer with a large rack of antlers.

The Native American representatives that visited this site expressed no strong concern for the plant communities at this site. The site was of minor interest to the representatives in regard to the petroglyphs and pictographs present.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	B

HOGBACK - AREA MAP (5LA - 5481).

This site is located at the southeastern end of the main portion of the Hogback (see Appendix D:Figure 11). The major feature of the site is at the high point on the Hogback (elevation 5513) where a number of petroglyphs were recorded.

Indian interpretation of one of the major petroglyph indicates that it is probably a map of portions of the study area. It may be a map showing most of the major features of the Occupational Complex. The "map" petroglyph and others around it were probably associated with hunting or site lookout activities related to the Sue Site. The site is of importance because of its role in the Occupational Complex and its unique petroglyphs.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	A.2, B

HOGBACK - CAIRN SITE (5LA - 5547).

The Cairn Site is located near the central portion of the Hogback (see Appendix D:Figure 11). A basaltic dike runs along much of the northern section of the Hogback.

Pecked into various positions on the dike are an assemblage of varied petroglyphs. These include a number of symbols, stick figures, and lifelike figures. One petroglyph has been interpreted as relating a story of three people fleeing to the Hogback. A portion of this petroglyph is represented as the graphic on the cover of this report. Such petroglyphs suggest that further analysis of petroglyphs may reveal important information about Indian events that occurred in the study area. These may be events of historic importance to Indian people who lived in the study area or they may represent supernatural events. The site probably also had a lookout function. The site may have been related to the Sue Site as base camp.

I. PLANTS	-	NO MITIGATION
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II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPH	-	A.2, B

HOGBACK - ENCLOSURES (5LA - 5554).

The Enclosures are found at a break in the Hogback near where the road passes (see Appendix D: Figure 12). On the Hogback are a series of stone circles or walls.

The Southern Ute representatives suggested that the site would serve as either a lookout or hunting blind. When driven, large herds of animals would seek out the break in the Hogback for escape. It is probable that this site is related to the Sue Site as base camp. The Utes suggested a key "gate keeping" function for this site guarding the southern entrance to the Occupational Complex.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	A.3, B

KILL SITE - PETROGLYPH BOULDERS (5LA - 5601).

This site is located on the northern flank of the Hogback just across a shallow arroyo that makes up part of the watershed of the Van Bremer stream system (see Appendix D: Figure 13). Here the stream has cut into a small ridge and basaltic boulders are strewn about. The Southern Utes believed that the site was utilized, in conjunction with a stone cliff, to produce a drop-off where herd animals could be killed during a game drive. The petroglyph boulders, it was suggested by the Indian representatives, could have been used to train young people in the techniques of hunting. This would have been possible because the site was so close to a major camping area as opposed to a High Plains kill site where time would only be spent hunting and processing the animals.

Only the Southern Ute representatives visited this site. They expressed little concern over the plant community here.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION

VI. PETROGLYPHS/PICTOGRAPHS - A.2, B, C.1

ROCK CROSSING (5LA - 5235).

The Rock Crossing Site is located just northwest of the "Rock Crossing" where the pipeline road crosses the Taylor Arroyo (see Appendix D: Figure 14). The site is a shallow, natural bowl-like depression in the prairie. In the center is a rock outcrop containing a shallow rock shelter.

It was suggested by the Cheyenne/Arapaho and Ute Mountain Ute representatives that the whole bowl constituted a single ceremonial site. Inside the rock shelter are red paint pictographs that suggest the site was utilized for the performance of the Cheyenne Arrow Renewal Ceremony. The physical remains that would be left behind at an Arrow Renewal ceremony are quite similar to those found at this site.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	A.1 , A.2, C
IV. LIVING/FOOD PROCESSING	-	A.2
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPHS/PICTOGRAPHS	-	A.1, A.2 and B

TAYLOR ARROYO ROCK SHELTERS (5LA - 5292).

This site is located where the Taylor Arroyo begins to form the upstream portion of its canyon (see Appendix D: Figure 15). The site is formed from the low walls of the canyon which enclose the Taylor Arroyo stream and a large outwash plain.

The major cultural features of the site are a series of rock shelters located at the base of the canyon walls. Another resource that tribal representatives expressed concern over was the variety of plant life at this site.

I. PLANTS	-	B.1, C
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	A.2
VI. PETROGLYPH/PICTOGRAPHS	-	NO MITIGATION

BIG WATER ARROYO GARDENS (No site number).

This site is located at a narrow portion of the Big Water Arroyo canyon just before it joins the Taylor Arroyo canyon system (see Appendix D: Figure 15). Here the canyon and stream combine to provide an ideal microenvironment for Native American

food plants.

Native American food plants are the major cultural resource of this site. It is recommended that this be one of the plant collecting sites that Native Americans be allowed to visit in order to gather and process plants for ceremonies such as curing. A discussion of these plant types appears in chapter V.

I. PLANTS	-	A.2, C
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPHS/PICTOGRAPHS	-	NO MITIGATION

PLAYA LAKE (No site number).

This prairie depression is located about two miles northeast of the main canyon portion of Taylor Arroyo (see Appendix D: Figure 16).

The site is covered with grasses, except for a small portion of its central portion. The Indian representatives who visited this site expressed no concern for the plant communities here. No mitigation is recommended.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	NO MITIGATION

FUZZY CANYON (5LA - 5563).

Fuzzy Canyon is a shallow side canyon, located on the north side of Taylor Arroyo just upstream from the junction with the Purgatoire River (see Appendix D: Map 16, page 140). The major cultural features of the site are a series of rock shelters located at the base of the canyon walls. Another resource that tribal representatives expressed concern over was the variety of plant life at this site.

At the caprock rim of Fuzzy Canyon is a series of small rock shelters. Most are too small to be living areas. Indian representatives from the Comanche tribe suggested that the small rock shelters along the side of the canyon were probably used for burials. A number of the small rockshelters have unnatural piles of rock in them which is typical of Comanche and Ute burial locations.

At the head of the lower portion of Fuzzy Canyon is a large rock shelter with a pool of water in front. The ceiling of this rock shelter contains a number of black and red pictographs which the Comanche representatives who visited the site were able to partially interpret. The messages contained within the pictographs are of historic and cultural importance to the Indian peoples who made them.

It is recommended that the canyon be avoided. If any groundbreaking is to occur at the Fuzzy Canyon Site, potentially impacted tribes should be contacted regarding the presence of a Native American Observer during all groundbreaking activity. It is important to note the significant negative impact that exhumed burials have on older members of most tribes.

It is recommended that the pictographs on the ceiling of the major rock shelter be protected from water damage. It appears that a Euroamerican checkdam, built just up the canyon from the cave to provide water for cattle, is causing the ceiling of the cave to become wet. This wetness will soon cause the delicate pictographs to fall off the ceiling. It is recommended that the checkdam be removed, if it is in fact the source of unnatural wetness in this cave.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	A.1, A.2.
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
IV. PETROGLYPH/PICTOGRAPHS	-	A.2,B

LOCKWOOD CANYON STAGE STOP (5LA - 5454).

This site is located at the head of Lockwood Canyon. The site begins at the Stage Stop and continues across the Lockwood Arroyo to the south (see Appendix D:Figure 17).

There were a number of plants found at this site for which the Comanche elder expressed concern. A great variety and quantity of plants were found at this site. These include cottonwoods, tamarisk and cattails. The latter are used in the Sun Dance ceremony. Plant functions varied widely but included food, medicine, and ceremonial uses. Because of the diversity of plant life here, it is recommended that Native American religious leaders and curers be allowed access to the site for gathering and processing these plants.

I. PLANTS	-	A.1, A.2, C
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	NO MITIGATION
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION

VI. PETROGLYPH/PICTOGRAPHS

- NO MITIGATION

JACK'S POINT (No site number).

This is one of the highest points visited during the field study. It is located at an elevation of 5272 feet (see Appendix D: Figure 18). The site is called High Point by local ranchers. It is a portion of canyon wall that projects out into the Purgatoire River canyon system just southwest of and overlooking the junction of Red Rock Canyon and the Purgatoire River.

Jack's Point may have been used as a vision quest site. Some Indian plants were recorded but no concern was expressed for them. Ivo Lindauer expressed the desire to revisit this site because of the potential of finding a rare species of plant there.

I. PLANTS	-	NO MITIGATION
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	A.1, C
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	NO MITIGATION

COLLECTING AND PROCESSING SITE (5LA - 5336).

This site is located on the first low hills that form the uplands that surround the Purgatoire riverine system. Despite the lack of surface water, there is a rich variety of food plants located at this site (see Appendix D: Figure 19). Unlike the Indian gardens found at the heads of and in the narrow portions of the canyons, these are upland plants like grasses, juniper, and pine trees.

The major resource of expressed concern at the Collecting Site is its food plants. Such a variety of food plants in one area is unusual and highly advantageous for collecting such plants as Indian Rice Grass which is used as a food in ceremonies.

Since this site is unusual in the amount and variety of food, medicine, and ceremonial plants it contains, it is recommended that Indian people be allowed to gather plants found at this site and that the site be protected.

Immediately to the north of the Collecting Site is a high butte. Time did not permit this butte to be visited by any tribal representatives, but Comanche elders who visited the Collecting Site noted that the butte would be a fine place for a young male to utilize as a vision quest site. If the high butte was a vision quest site, then it should be protected and access to it should be provided for Indian people. It is recommended that

funding be provided so that Indian people can visit the high butte so its status as a vision quest site can be determined.

I. PLANTS	-	A.1, A.2, C
II. BURIALS	-	NO MITIGATION
III. CEREMONIAL/VISION QUEST	-	A.1, A.2, C
IV. LIVING/FOOD PROCESSING	-	NO MITIGATION
V. ARTIFACTS	-	NO MITIGATION
VI. PETROGLYPH/PICTOGRAPHS	-	NO MITIGATION

MITIGATION RESPONSE OF

APACHE TRIBE OF OKLAHOMA

Each of the seven Indian tribes received a copy of the draft final report. Subsequent to the sending of that draft report all tribal administrators were contacted in order to address any additions or corrections they may wish to make. Overall these personal phone contacts have yielded minor corrections and general approval of the report and its recommendations. For the majority of these tribes no further comment is required. The Apache Tribe of Oklahoma, however, wanted their comments to be made formally in the final report. The following is taken from an official tribal letter written to Richard Stoffle on June 4, 1984 by June Walker, Secretary/Treasurer of the Apache Tribe of Oklahoma:

The final draft of the Fort Carson Pinon Canyon project was read with great interest. The Apache Tribe of Oklahoma submits the following response concerning the report. Due to funds being unavailable at the time of the on site visitations, the tribe was unable to send representatives, however, we appreciate the opportunity to express our concerns in this matter.

It is the opinion of the Apache Tribe of Oklahoma that in the report recommendations concerning participations of tribal representatives in the various stages of mitigation should be pursued.

PRECONSTRUCTION MITIGATION

Due to various construction projects some of the respective tribes have lost valuable sacred resources. Many of these resources which have been lost were not the fault of the tribes. Many tribes do not have the human resources in these areas to assist. In some cases the inability extends in the areas of finances to have these resources. Although funds were not available during the initial phase of mitigations, the Apache Tribe would make every effort should some type

of preconstruction mitigation become reality.

MITIGATION OF NATIVE AMERICAN BURIALS

History records that many of the Native American tribes have lost their burial grounds due to lack of identification by not only the tribes but individuals as well. Some tribal beliefs include "unrest of the spirits due to disturbance of final rest place." As indicated in the report, if a procedure can be implemented to prevent loss of burial grounds, etc., the Apache Tribe would surely support such programs.

MITIGATION OF INDIAN PLANTS

Plants have been a big part of the Native American culture in the area of religion and medicine. Many of the medicines which are used today in the modern society stemmed from the belief and use initially by the Native American. Health concerns are and have always been a priority of the various Indian governments. Some tribes have taken upon themselves to contract services which at one time were administered by the federal government, and to provide those services at the tribal level. This process has proved to be a success as many clinics and hospitals now allow a medicine man to be a part of the services which are provided. Because of that belief in "Indian Medicine," plants are a vital part of the Native American society and anything that would assist in maintaining these valuable resources will be strongly supported by the Apache Tribe of Oklahoma.

SITE SPECIFIC MITIGATION & ALTERNATIVE ACTIONS

The Apache Tribe of Oklahoma supports the final draft of this project and all recommendations which have been developed. Many of the tribes across this country have lost some aspects of their tribal culture, medicine, languages, and etc. The only resources some tribes have are the elders. The elders are considered a valuable resource. However, resources which were plentiful at one time are now but vanished. In order to maintain what little culture the tribes have, steps such as recommended through the report should be strongly supported.

CONCLUSION

On behalf of the Apache Tribe of Oklahoma I commend you on a fine report and support all of your efforts and encourage all of the other participants of the respective tribes to do so as well.

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APPENDICES

APPENDIX A: POWERS ELEVATION, ORAL HISTORY REPORT
TO RICHARD STOFFLE.



POWERS ELEVATION

OIL WELL ELEVATIONS — LOCATIONS
ENVIRONMENTAL — ARCHAEOLOGICAL SERVICE
800 SOUTH CHERRY STREET, SUITE 100
DENVER, COLORADO 80222
PHONE NO. 303/321-3217

March 28, 1984

Dr. Richard W. Stoffle
Division of Behavioral Science
University of Wisconsin-Parkside
Kenosha, Wisconsin 53141

Dear Dr. Stoffle:

Enclosed with this letter you will find the data collected by Powers Elevation during the conduct of the History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area, Las Animas, Colorado, Contract No. CX 1200-3-A066 with the National Park Service, for the original oral history questions. The idea, as put forth in our scope-of-work, was for the historical contractor to gather data from local informants about the aboriginal use of the region, and to submit this data to the ethnographer for analysis.

During the course of our oral history investigations, Powers Elevation tape recorded interviews with 16 local informants. The names of informants came originally from an informal list prepared by Mike Hanna, formerly the environmental officer at Fort Carson, and conveyed to Powers through Mary Barber of the Fort Carson environmental affairs office. This list was then added to when certain informants recommended that we talk to other people. Nine of the 16 people had actually lived and owned land in the Pinon Canyon project area. The remaining seven either lived near the area, or had some knowledge about it. The interviews were conducted by Mr. Richard Carrillo, my research assistant, in January and February of this year.

The interviews were structured along topical lines. For each topic a specific list of questions were discussed with every informant. Therefore, the data is comparable between interviews. The Aboriginal Oral History Questions were as follows:

1. Do you, or anyone of your acquaintances, know of any Indians having been in the area?
2. Where?
3. When?
4. Who?

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5. Do you know why they were here?

6. Where did they come from and where were they going?

Of the 16 people interviewed, ten had some comments about the Native American occupation of the region, while six claimed to have no knowledge what-so-ever about aboriginal activities. On the whole, as a professional historian, I do not have a high degree of trust in the reliability of the data. Much of the information is heresay, either rumors or stories passed down through the generations, or items picked out of books they have read. Although some of the informants had lived in the area for over 70 years, only one had first hand experience with Native Americans in the area, and he happens to be a Cherokee/Navajo himself.

This Native American, Mr. Thunder Cloud, gave us one of the most important pieces of information about aboriginal activities in the area. During the Great Depression there was a community of Native Americans, mainly Arapahoes and Cheyennes, living near the project area at a place called Alfalfa. This town was located at Luna Canyon, which I believe is just south of the Pinon Canyon area.

In examining the answers to the questions, the following patterns came to light. Several people commented that while there were no Indians in the area while they lived there, they had seen signs of Indian camps, such as arrowheads and rock art. Six of the informants indicated they had heard stories about Indians from friends or relatives. Four of these stories are similar, in that they discuss the fact that when the Indians were pushed on to reservations, some "renegade" Indians would return to the Purgatoire River area and kill stock belonging to local ranchers. Two of these stories (one from Martin Salas and the other from Mrs. Tom Russell) appear to be the description of the same incident, since they both took place at Higbee near the Richard's homestead in the 1880s.

When talking about the time period for this Indian activity, there were few clear dates given. Two informants guessed that Indians were in the project area during the 1830s. Two informants mentioned the 1860s. Two informants talked about incidents with Indians in the area in the 1870s. Mr. Salas and Mrs. Russell agreed that the Indian raid on Higbee occurred in the 1880s. Mr. Thunder Cloud was very specific about the time of occupation of the town of Alfalfa, dating it from 1929 to 1943.

A number of different locations were mentioned during the discussion of where the Indians were seen. This included

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Lockwood Arroyo (near the stage coach station), Van Bremer Arroyo (where the old stage coach road crossed it), Rock Crossing, near the old Sheehorn homestead, at Higbee, on the benches along the north bank of the Purgatoire near the Rourke ranch, at Nine Mile Bottom, at Iron Springs, and at the town of Alfalfa.

The tribes mentioned include the Utes, Comanches, Kiowas, Arapahoes, Cheyennes, and Apaches. A skim of the literature would have produced a similar list.

When asked why they thought the Indians came to the region, most of the informants said it was to hunt, or look for food. Several of the informants also commented that they thought the Indians only migrated or traveled through the region, and did not permanently reside there.

As to where they came from, several informants mentioned that they came from reservations. One informant said they followed the Santa Fe Trail into the area. Another informant thought the Indians came from Big Timbers. And one informant mentioned that they may have come from the vicinity of Bent's Old Fort.

I hope that this information will be of use to you. I have included the individual segment from each of the positive interviews. These are not direct quotes, but rather, simple paraphrasing of what was said. I am also sending a copy of this data to the University of Denver.

If you have any questions about this information, or any other relevant matter, please feel free to call me.

Sincerely,



Paul D. Friedman
Principal Investigator
Pinon Canyon History Project

cc: Mark Guthrie, University of Denver

Interview with Richard Louden, Branson, Colorado, 23 January 1984

The Louden family moved to Las Animas County, Colorado from Kansas around 1902, and settled near Branson, which is just east of the Pinon Canyon project area on the Mesa de Mayo.

Aboriginal Oral History Questions:

Do you know of any Indians in the area?

Not in his generation. He has heard legends that the Kiowa once attacked the Cordova Plaza and stole cattle. The Cordova Plaza was located on the east side of the Purgatoire River, near Red Rocks. Rufus Sage came through the project area in 1842 during the aborted "Texas invasion" of New Mexico and saw many signs of Indians along the Purgatoire.

Where?

Red Rocks Canyon, in vicinity of Cordova Plaza was the location of the incident previously mentioned.

When?

The Cordova Plaza incident with the Kiowa probably occurred in the 1870s.

Who?

The Kiowa.

Why were they here?

In 1836 the Kiowa moved south of the Arkansas River, after being defeated in battle with the Cheyenne.

Where did they come from?

From the plains north of the Arkansas River.

Oral History Interview

Kit Carson, La Junta, Colorado, 24 January 1984

Mr. Carson is the grandson of the famous explorer and mountain man, Kit Carson. He is 72 years old, and once had a homestead in Bravo Canyon, in the project area.

Aboriginal Oral History Questions:

Do you know of any Indians in the area?

The Indians only came through on the warpath. So when they came through the local ranchers would give them meat, so that the Indians wouldn't get wild and kill them.

Where?

Come from vicinity of Bent's Fort, up the Purgatoire River.

When?

1875 or there about.

What tribes?

Didn't know. Renegade Indians off the reservation.

Why were they there?

They came to hunt and to get away from the reservation.

Where they came from and where they went?

Just came up the Purgatoire.

Oral History Interview

Ms. Betty Inge, La Junta, Colorado. 25 January 1984

Ms. Inge's family came to Colorado in 1888. She has long been interested in the history of southern Colorado.

Aboriginal Oral History Questions:

Do you know of any Indians in the area?

Not from personal knowledge. The information she has was acquired by reading books like the Pioneer Parade. There are Indian writings in the Nine Mile Bottom area of the Purgatoire River.

Where?

Bear Rock has Indian writings.

When?

1850s and 1860s.

What tribes?

Cheyennes, Utes, and Kiowas all used area.

Why did they come to the area?

For a change of climate and to hunt buffalo.

Where did they come from and where were they going?

Back and forth from Big Timber on the Arkansas River.

Interview with Martin Salas, Branson, Colorado, 27 January 1984

Salas family came from Mora, New Mexico to Higbee, Colorado area around early 1890s. Mr. Salas' father later worked on the Rourke ranch in Pinon Canyon project area.

Aboriginal Oral History Questions:

1. Do you, or anyone of your acquaintances, know of any Indians having been in the area?

Response:

His father never mentioned any Indians, but his mother did. She said that the Indians lived in the "lower part of Higbee." This was during the time when the Indians were being forced on to the reservation, and some young "renegade" Indians stayed in the area. Once some Indians were seen eating a cow they had killed from one of the Higbee area ranches. Another time an Indian was seen staring into the window of one of the ranch houses. At this time these Indians were dodging the soldiers who wanted to put them back on the reservation.

2. Where?

Response:

The Higbee country.

3. When?

Response:

1880s (?)

4. Who?

Response:

Heard that they were Cheyenne and Arapaho

5. Do you know why they were here?

Response:

Hunting. They would come in the summer time to the vicinity of the Rourke ranch to hunt buffalo. They probably then dried the buffalo meat to eat in the winter. On the benches along the north bank of the Purgatoire River near the Rourke ranch you can see their old camp sites, marked by arrowheads and ash dumps.

6. Where did they come from and where were they going?

No response.

Oral History Interview

Mrs. Thomas Russell. Branson, Colorado. 27 January 1984.

Mrs. Russell has lived in area since 1900. Her husband worked for Colorado Interstate Gas, and lived at town of Pinon Canyon.

Aboriginal Oral History Questions

Do you know of any Indians in the area?

When her mother lived at Higbee the Indians were still on the "rampage." Her mother's grandfather, Andres Lujan, whenever they heard of these Indian uprisings, would gather the families into their homes, darken the windows, so the Indians, as they came through, won't think there was anyone home. And you had to be quiet as possible. Then one time her mother remembered the Indians came through, and did not molest them, but they did take some of the milk stock. But other than that they didn't do any harm.

Where?

Higbee. Her grandfather had a place on the Picketwire just south of where the bridge crosses the river now.

When?

1880s. Her mother born in 1872.

What tribe?

Don't know.

What reason were they there?

Trying to find food.

Where did they come from, or where were they going.

Don't know.

Oral History Interview

Robert Sabin, La Junta, Colorado. 31 January 1984.

Mr. Sabin is a descent of the Rourke family. Had interest in the Rourke ranch at the mouth of Bent Canyon in the project area.

Aboriginal Oral History Questions:

Do you know of any Indians in the area?

There were very few Indians who stayed in the area after his grandfather's time. They migrated through the area.

When?

1860s

Where?

They just migratated through, did not stay.

What tribe?

There is evidence to show that Indians lived there, along the Purgatoire River, at one time. Such as the hyroglphics and smoke in caves. "But, I'm not an archaeologist, so I don't know who or when they were there."

Why where they there?

Probably just hunting.

Where did they come from and where were they going?

Don't know.

Oral History Interview

Charles Sheehorn, Model Colorado. February 1, 1984.

Mr. Sheehorn's family moved to the Pinon Canyon project area in 1916 and settled near Model. Today Mr. Sheehorn still lives in the area, and runs the Model store.

Aboriginal Oral History Questions

Do you know of any Indians having been in the area?

There wasn't any Indians here when my father came in 1916. But there were a lot of Indian signs. Near the homestead there was a bluff with Indian drawings on it. And where the old stage line crossed Van Bremer Arroyo there was an Indian camp site, near a spring.

Where?

Near the homestead, he picked up arrowheads. Indians travelled all through the area.

When?

Did not know.

What tribe?

Heard they were Comanches.

Why were they here?

Hunting. He used to find buffalo horns when he was young, out on the plains.

Where did they come from, and where were they going?

Guess the Indians followed the Santa Fe Trail. Don't know where they came from or where they were going.

Oral History Interview

Calista Graves, Model, Colorado. 1 February 1984.

Ms. Graves' father came to the region after WWI. The Graves ranch was established near Iron Springs, very close to the project area.

Aboriginal Oral History Questions:

Do know of any Indians in the area?

There are stories of Indians in the area. Up Iron Springs, about 3/4 of a mile from the Graves ranch are petroglyphs, arrowheads, manos and metates. Galen Baker, an archaeologist from Trinidad, came to excavate at some of these sites; mainly "tipi rings." Galen decided that these remains pre-dated Utes and Comanches. The Indians at Iron Springs were not permanent, but migrated through area in search of game.

Where?

Artifacts found near permanent water. Near ranch. Also in Sheep canyon, where there are more petroglyphs. There is also supposed to be a ceremonial burial ground above the canyon.

When?

Relates to Bent's Fort (1830s-1840s)

What tribes?

Don't know. Morris Taylor told her that people who ran the original Iron Springs ranch found a wounded Indian and nursed him back to health. This Indian later warned the ranchers of an impending Indian attack. (Ed note: this is a famous incident at the Iron Springs stage station, dated to 1864, and credited to Cheyenne)

Why were they in the area?

Mainly hunting.

Where did they come from and where were they going?

Don't know.

Oral History Interview

Mary Ann Mincic, Trinidad, Colorado. 14 February 1984

Ms. Mincic is a former resident of the Pinon Canyon project area. Her grandfather homesteaded there around 1910. Her ranch was just recently acquired by the Army.

Aboriginal Oral History Questions

Do you know of any Indians in the area?

There were Indians in the area, north of our place. You can see the remains one of their camp sites at the Lockwood stage station. You can see little piles of rock there on the banks of the stream.

When?

I have no idea. An old uncle told her that the people who were in the Lockwood area before him had seen Indians, but she did not know when this was. Uncle came in 1916.

What tribe?

I'm not sure. Some say Apaches, some say Comanches.

Why?

I have no idea.

Where did they come from, and where were they going?

To the west of the Lockwood old stage stop, there was a permanent Indian campground.

Oral History Interview

Thunder Cloud. Model, Colorado. 16 February 1984.

Mr. Thunder Cloud is a Native American. He is Cherokee/Navajo. He came to area in 1928 and lived in the community of Alfalfa.

Aboriginal Oral History Questions

Do you know of any Indians in the area?

Yes.

When?

From 1929 to 1948.

Where?

Alfalfa.

What tribes?

The ones I knew were mainly Arapaho and Cheyenne.

Why were they in the area?

They came because of hard times. When people bought their land and chased them out of there. And all the customs they had between them, and the blood they had, and they couldn't get along with the rich people. They made them suffer alot. The hard times was during the Great Depression. They came to the area to raise their own food and livestock. Homesteaded on the south side of the Purgatoire River, by Luna Canyon, where Alfalfa was. This was a community of Indians. Came from different parts of the country. Now these people are on the reservation now. Some buried in area.

Where did they come from and where were they going?

There were hard times on the reservations, so they had to let the people go where ever they could survive. There was no way for them to make a living, no government was helping them, raise their own income.

APPENDIX B: SUMMARY OF PLANTS DOCUMENTED
BY BOTANIST, IVO LINDAUER

SPECIES LIST OF VOUCHERED SPECIMENS AND REPORTED USES

<u>Scientific Name</u>	<u>Common Name</u>	<u>Food (processing)</u>	<u>Medical</u>	<u>OTHER</u>
<u>Agropyron smithii</u> Rydb. <u>var. molle</u>	Western wheat grass	Probably used as food		Feed for livestock
<u>Arenaria hookeri</u> Nutt.	Sandwort			
<u>Artemisia ludoviciana</u>	Prairie sage			Ceremonial
<u>Artemisia tridentata</u> Nutt.	Big sagebrush			Ceremonial
<u>Asclepias asperula</u> (Dcne.) Woodson	Creeping milkweed		Remove warts Injuries	
<u>Asclepias latifolia</u> (Torri Raf.)	Milkweed			
<u>Aster bigelovii</u> Gray	Sticky aster			
<u>Atriplex canescens</u> (Pursh) Nutt.	Saltbrush			Fuel
<u>Bouteloua gracilis</u> (H. B. K.) Lag.	Blue grama grass			Fuel
<u>Brickellia grandiflora</u> Nutt.	Bricklebush			
<u>Chrysothamnus nauseosus</u> (Pall.) Britt.	Rabbitbrush	Tea (yellow flower collected)		Fuel
<u>Cirsium undulatum</u> (Nutt.) Spreng.	Bull thistle	Dried powder	Purple flower head applied to injuries	
<u>Dalea candida</u> Willd.	Prairie clover			
<u>Forsellesia planitierum</u> Ensign.				

SPECIES LIST CONT'D

<u>Scientific Name</u>	<u>Common Name</u>	<u>Food (processing)</u>	<u>Medical</u>	<u>Other</u>
<u>Gaillardia pinnatifida</u> Torr.	Blanketflower			
<u>Gutierrezia sarothrae</u> (Pursh) Britt.	Snakeweed			
<u>Helianthus annuus</u> L.	Sunflower			
<u>Hilaria jamesii</u> (Torr.) Benth.	Hilaria			
<u>Hymenoxys acaulis</u> (Pursh) Parker	Yellow Daisy			
<u>Juniperus mexicana</u> var. <u>monosperma</u> (Engelm.)	Juniper - Cedar	Tea	Cold/stomach	Cleansing Birthing
<u>Lactuca biennis</u> (Woench.) Fern.	Tall blue lettuce			Ceremonial Cleansing effect
<u>Lesquerella fendleri</u> (Gray) Wats.	Bladder Pod			
<u>Lycium pallidum</u> Miers	Wolfberry-Tomatillo			
<u>Medicago</u> sp.	Clover			
<u>Melampodium cinereum</u> DC.	White daisy			
<u>Mirabilis multiflora</u> (Torr.) Gray in Torr.	Red four o'clock			
<u>Muhlenbergia torreyi</u> (Kunch) Hitchc.	Ring muhly			
<u>Opuntia imbricata</u> (Haw.) DC.	Candelabra cactus	Red pods		

SPECIES LIST CONT'D.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Food (processing)</u>	<u>Medical</u>	<u>Other</u>
<u>Opuntia polyacantha</u> Haw.	Prickly pear	Pods		
<u>Oryzopsis hymenoides</u> (R. & S.) Ricker	Indian rice grass	Probably used as food		Livestock feed
<u>Phragmites communis</u> Trin.	Giant reed grass			Sun dance Bedding
<u>Populus sargentii</u> Dode.	Cottonwood		Leaves for cooling	
<u>Psoralea tenuiflora</u> Pursh	Pursh			
<u>Ptelea baldwini</u> T. & G.	Hop tree			
<u>Rhus radicans</u> L.	Posion ivy			
<u>Rhus trilobata</u> Nutt.	Skunkbrush	Berries (fresh and pounded into cakes)		
<u>Ribes inerme</u> Rydb.	Wild currant	Berries (fresh and dry mash used with meat)		
<u>Rumex crispus</u> L.	Crley Dock		Diarrhea	
<u>Salix interior</u> Rowlee	Narrow leaf willow			Cradle boards Shelters and backrests
<u>Sambucus racemosa</u> L. ssp. <u>pubens</u> (Michx.)	Elderberry			
<u>Sporobolus cryptandrus</u> (Torr.) Hook.	Sand dropseed			Livestock feed
<u>Stipa comata</u> Trin. & Rupr.	Needlegrass			

SPECIES LIST CONT'D.

Scientific Name	Common Name	Food (processing)	Medical	Other
* <u>Tamarix</u> sp.	Salt cedar			Cradle boards
<u>Tripterocalyx micranthus</u> (Torr.) Hook.	Sand Verbena			
<u>Typha angustifolia</u> L.	Narrow leaf cattail	Roots as a vegetable		
<u>Verbascum thapsus</u> L.	Mullen		Leaves used for dressing wounds	
<u>Vitis riparia</u> Michx.	Wild grape	Fruit (fresh and pounded with flour for patties & dried Pod boiled Roots pounded	Burns and injuries	Shampoo and soap
<u>Yucca glauca</u> Nutt.	Yucca			

* Since this species was introduced into the United States in the 19th century, its use is questionable for early Native Americans.

SPECIES LIST CONT'D.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Food (processing)</u>	<u>Medical</u>	<u>Other</u>
* <u>Tamarix</u> sp.	Salt cedar			Cradle boards
<u>Triptero calyx micranthus</u> (Torr.) Hook.	Sand Verbena			
<u>Typha angustifolia</u> L.	Narrow leaf cattail	Roots as a vegetable		
<u>Verbascum thapsus</u> L.	Mullen		Leaves used for dressing wounds	
<u>Vitis riparia</u> Michx.	Wild grape	Fruit (fresh and pounded with flour for patties & dried) Pod boiled	Burns and injuries	Shampoo and soap
<u>Yucca glauca</u> Nutt.	Yucca	Roots pounded		

* Since this species was introduced into the United States in the 19th century, its use is questionable for early Native Americans.

APPENDIX C: LETTER FROM APACHE TRIBE OF OKLAHOMA

APACHE BUSINESS COMMITTEE

LEROY NIMSEY, Chairman
HARRY KAUDLEKAULE, Vice-Chairman
JUNE WALKER, Secretary-Treasurer
TELEPHONE: 405 / 247 - 2822

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APACHE BUSINESS COMMITTEE

KENNETH LOOKINGGLASS, Committee Member
GEORGE KOMARDLEY, Committee Member
BOBBY JAY, Tribal Administrator
TELEPHONE: 405 / 247 - 9493

Apache Tribe of Oklahoma

Post Office Box 1220
Anadarko, Oklahoma 73005

June 4, 1984

Richard W. Stoffle, Director
Ethnohistory and American Indian
Sacred Site Research
Fort Carson Pinon Canyon
Manuever Area Project
University of Wisconsin-Parkside
Applied Urban Field School
294 Tallent Hall
Post Office Box 2000
Kenosha, Wisconsin 53141

Dear Mr. Stoffle,

The final draft of the Fort Carson Pinon Canyon project was read with great interest. The Apache Tribe of Oklahoma submits the following response concerning the report. Due to funds being unavailable at the time of site by site mitigations, the tribe was unable to send representatives, however, we appreciate the opportunity to express our concerns in this matter.

RESPONSE TO FINAL DRAFT OF FORT CARSON PINON CANYON REPORT

It is the opinion of the Apache Tribe of Oklahoma that in the report recommendations concerning participations of tribal representatives in the various stages of mitigations should be pursued.

Preconstruciton Mitigation

Due to various construction projects some of the respective tribes have lost valuable sacred resources. Many of these resources which have been lost were not the fault of the tribes. Many tribes do not have the human resources in these areas to assist. In some cases the inability extends in the areas of finances to have these resources. Although funds were not avaiilable during the initial phase of mitigations the Apache Tribe would make every effort should some type of preconstructions mitigation become reality.

RESPONSE ON FINAL DRAFT OF
FORT CARSON PINON REPORT
PAGE 2

Mitigation of Native American Burials

History records that many of the Native American tribes have lost their burial grounds due to lack of identification by not only the tribes but individuals as well. Some tribal beliefs include "unrest of the spirits due to disturbance of final rest place". As indicated in the report, if a procedure can be implemented to prevent loss of burial grounds, etc; the Apache Tribe would surely support such programs.

Mitigation of Indian Plants

Plants have been a big part of the Native American culture in the area of religion and medicine. Many of the medicines which are used today in the modern society stemmed from the belief and use initially by the Native American. Health concerns is and has always been a priority of the various Indian governments. Some tribe have taken upon themselves to contract services which at one time were administered by the federal government, and to provide those services at the tribal level. This process has proved to be a success as many clinics and hospitals now allow a medicine man to be a part of the services which are provided. Because of that belief in "Indian Medicine", plants are a vital part of the Native American society and anything that would assist in maintaining these valuable resources will be strongly supported by the Apache Tribe of Oklahoma

Site Specific Mitigation & Alternative Actions

The Apache Tribe of Oklahoma supports the final draft of this project and all recommendations which have been developed. Many of the tribes across this country have lost some aspects of their tribal culture, medicine, languages, and etc; The only resources some tribes have are the elders. The elders are considered a valuable resource. However, resources which were plentiful at one time are now but vanished, in order to maintain what little culture the tribes have, steps such as recommended through the report should be strongly supported.

RESPONSE ON FINAL DRAFT OF
FORT CARSON PINON REPORT
PAGE 3

Conclusion

On behalf of the Apache Tribe of Oklahoma I commend you on a fine report and support all of your efforts and encourage all of the other participants of the respective tribes to do so as well.

Should you need additional information, please feel free to call this office at the numbers provided.

Respectfully,

June Walker
June Walker
Secretary/Treasurer

JW:gt