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Martha L. Henderson

Louisiana State University and Agricultural & Mechanical College

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Landscape changes on the Mescalero Apache Reservation: Eastern Apache adaptation to federal Indian policy

Henderson, Martha L., Ph.D.
The Louisiana State University and Agricultural and Mechanical Col., 1988

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LANDSCAPE CHANGES ON THE MESCALERO APACHE RESERVATION:
EASTERN APACHE ADAPTATION TO FEDERAL INDIAN POLICY

A Dissertation
Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirement for the degree of
Doctor of Philosophy

in
The Department of Geography and Anthropology

by
Martha L. Henderson
B.S., Western Oregon State College
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December, 1988
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This volume is thankfully dedicated to

Gale Masters

and

Mary Henkel
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ABSTRACT

The Eastern Apache, once a hunter and gatherer culture group of Native Americans, now reside as a tribe formally recognized by the United States government on the Mescalero Apache Reservation in south central New Mexico. Since Eastern Apache were assigned to the reservation by executive order in 1883, the group has adopted aspects of American culture while maintaining Eastern Apache landscape patterns. This dissertation examines Eastern Apache landscape patterns prior to and after reservation assignment with the use of geographical, historical, ethnographic, and economic data. While United States Indian policy has emphasized culture change, Eastern Apache landscape patterns of land occupation, communal land management, seasonal work patterns, and matrilocal settlement are evident on the reservation. Analysis of the data indicate Mescalero Apache adaptive use of land and federal policies to create a modern landscape based on patterns similar to the Eastern Apaches' proto-historical period.
CHAPTER I

NATIVE AMERICAN LANDSCAPES AND CULTURAL ADAPTATION

The cultural landscape of North America has changed through time as environmental conditions and human occupation have been altered. Perhaps the greatest transformation since the Pleistocene epoch is the result of contact between Native Americans and colonial Europeans. Francis Jennings (1975:30) writes, "The American land was more like a widow than a virgin. Europeans did not find a wilderness here; rather, however involuntarily, they made one."

The European invasion of North America was a traumatic event in Native American history. Since the time of contact, Europeans and, later, Americans established political and economic policies intended to control native inhabitants of the continent. The United States government has attempted, through ignorance or best intentions, to destroy Indian culture. Indian resistance to cultural destruction was first characterized by violent contact with Indian leaders and their bands including Geronimo and Cochise of the Eastern Apache.

The focus of this research is changes in the temporal and spatial landscape of Eastern Apache culture on the Mescalero Apache Reservation in New Mexico (Figure 1). This research examines and evaluates changes in Eastern Apache land occupation, land uses, and settlement patterns.
Figure 1
since reservation assignment as evidence of Eastern Apache adaptive use of land and federal policy.

The process of Native American cultural change has been investigated by anthropologists who have measured and evaluated changes in the material and nonmaterial culture of Native American groups (Hodge 1976). Anthropologists have contributed much to the understanding of the Native American culture change process by describing how the indigenous population has adopted American cultural characteristics. However, the process of culture change has rarely been evaluated in terms of Native Americans' relationship to land (Sutton 1975).

Human-land relationships are a primary topic of cultural geography (Pattison 1964). Human ecology investigates cultural and regional patterns of agriculture, resource development, and settlement. These patterns are evaluated by human ecologists in light of an indigenous population's ability to adapt environmental conditions to cultural preferences (Grossman 1977).

The process of Native American culture change can be better understood by including studies of changing geographic patterns. Alterations in land occupation and spatial organization reflect fluctuating circumstances in a culture group's political, social, or economic framework. Recent reordering of Native American geographic patterns provides an opportunity to identify the significance of geographic patterns in cultural survival.
The significance of Native American relationships to land is critical to understanding the cultures of native groups. As one geographer has written, "land has emotional meaning, a psychological significance for the Indian that is far more intense than our nostalgic longing for the family farm and a rural way of life" (Sutton 1975:2). This significance cannot be ignored when evaluating Native American adaptation to mainstream American society. An attachment to land is a strong cultural preference that contributes to the diversity of human-land relationships around the world.

Non-Indian geographers find it difficult to measure or describe the Native American's land values on a psychological or spiritual level. The value of land can only be recorded as the non-Indian geographer objectively measures material or nonmaterial symbols of the value such as visible changes in location, use, and settlement. The changes in these characteristics can assist in the description of Native American culture change. This dissertation contributes to the knowledge of Mescalero Apache land use preferences and to the significance of spatial organization in cultural survival.

The Eastern Apache are a Native American culture that has experienced rapid culture change to survive in American society. After 1852, the location and movements of the Mescalero Apache were regulated by the United States federal government (Harris and Carlisle 1985). Modern reservation boundaries were established by a
March 24, 1883 Executive Order (Arthur 1883). Since that date, the Eastern Apache have experienced a transition from nomadic hunters and gatherers to modern resource developers as the Mescalero Apache Tribe. Their dominance of resources between the Rio Grande and the Pecos River has been reduced to the exploitation of land and resources in the Sacramento Mountains of eastern New Mexico.

The United States established a trust relationship with the Eastern Apache and other Native Americans during the nineteenth century to minimize the exploitation of Native Americans and create a dialogue between Indian nations and the American government (Schmeckebier 1927). Interpretation of the trust relationship has changed through time and a clear definition is lacking.

Since 1927, questions have arisen about the need for federal protection of Indian rights and resources. Anthropological evidence indicates that more than one Native American group has been able to convert to the Anglo economic system, for example the Menomini of Wisconsin (Keesing 1939) and the Choctaw of Mississippi (McKee 1980). Modern objection to the maintenance of the relationship also has been raised on the basis that the trust relationship has promoted a false sense of security among Indians and has a negative effect on Indian culture change (Sutton 1975).

Some scholars argue that the Indians are not so well protected by the government because the government retains the trust relationship as a means of controlling access to
valuable resources located on Indian reservations (Jennings 1975). These same scholars have argued that Indians need protection from the federal government (Deloria 1985).

The trust relationship is administered by the federal government through departmental and agency programs. Originally, the relationship was administered by the Office of Indian Affairs, first an agency within the Department of War and later assigned to the Department of Interior in 1849 (Taylor, T. 1972). A Board of Indian Commissioners, appointed by President Grant in 1869, was given joint control (with the Secretary of the Interior) over the disbursement of appropriations. In 1933 the Board was dismissed and the Bureau of Indian Affairs (BIA) became the primary federal agency responsible for administration of the trust relationship (Taylor, T. 1972).

Within the Department of Interior (Figure 2), the BIA is directed by an Assistant Secretary to the Secretary of the Interior. Program funding is divided between education, Indian service, economic development and employment, natural resources development, trust responsibilities, facilities management, and general administration (Taylor, T. 1983). The Bureau of Indian Affairs administers the trust relationship with professional staffmembers and specialists from the Departments of Health and Human Services, Education, Agriculture, Housing and Urban Development, Labor, Commerce, and the Treasury.
DEPARTMENT OF THE INTERIOR

Solicitor

Fish and Wildlife and Parks

Secretary

Indian Affairs

Energy and Minerals

Geological Survey

Territorial and Int'l Affairs

Bureau of Mines

Executive Assistant

Land and Water Resources

Bureau of Land Management

Bureau of Reclamation

National Park Service

Fish and Wildlife Service

Figure 2
Federal administration of the trust relationship is marked by historic reversal and rebuttal. In 1887 the Allotment Act was passed by Congress to "civilize" the Native American population by dividing reservations into allotted land for Indian farming and opening unallotted land for white settlement (Cohen 1937). The failure of Native American farming on nontillable land allotments, inadequate supplies of seed and machinery, and lack of access to markets was miserable. In 1934 the Indian Reorganization Act was passed to reinforce Native American cultures by institutionalizing tribes and encouraging economic activity on the reservations (Kelly 1983).

Federal policy was reversed in 1952 with a policy of reservation and tribal termination. Native Americans were encouraged to move to urban areas and acculturate to urban society (Fixico 1987). Federal policy was once again reversed in 1968 with the passage of the Self-Determination and Education Act. The Self-Determination and Education Act, the current federal policy, encourages Native Americans to take a leadership role in reservation decision-making, and promotes culture change through an educational and economically oriented process (Prucha 1981).

While modern Mescalero Apache lifeways resemble American culture, the Mescalero Apache respond to federal land policies by adapting land use and settlement patterns that reinforce Eastern Apache cultural traditions. The Mescalero Apache maintain relationships with their
reservation environment similar to Eastern Apache, pre-reservation relationships to land.

The process of culture change is measurable by comparing changes in land use and settlement patterns prior to reservation assignment and with each change in federal policy. Pre-reservation Eastern Apache geography described in Chapter III places the modern Mescalero Apache landscape in a temporal and spatial context. Land occupation, land use, and settlement patterns are described by activity and location during each federal policy period in Chapters IV and V. The data are divided into four time periods, 1887-1934, 1934-1952, 1952-1968, and 1968 to the present. A quantitative analysis of the data is presented in Chapter VI, and conclusions are drawn in the final chapter.

This research includes field work, library research, quantitative analysis, and study. Field work was begun on the Mescalero Apache Reservation in October of 1986 and completed in 1987. Agricultural land use and settlement data were gathered from informants, frequent visits to the reservation, and archival sources.

Library sources and archival data were gathered at the National Archives in Washington, D.C. and the National Archives Cartographic Center in Alexandria, Virginia, and the Library of Congress in January of 1987. Additional research was accomplished in government document and archive sections of the Zimmerman Library at the University of New Mexico and New Mexico State University Library.

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Sources at the Lincoln National Forest and the Mescalero Agency were also reviewed.

Field mapping of settlement data was completed in the fall of 1987. These modern housing areas were compared with residential areas described on 1936 U. S. Soil Conservation Service (SCS) maps and U.S. Geological Survey topographical maps. The SCS map series was also used to identify 1936 agricultural land uses and crop types. Modern SCS maps, U. S. Forest Service maps, and BIA maps were consulted for current land uses. Data analysis was completed with the use of LOTUS 123 microcomputer software.

Although ethnographic fieldwork among the Mescalero Apache was deemed important to the research effort, it could not be conducted because of the reluctant nature of tribal members to speak with outsiders. Negative experiences with previous researchers and a preference for social isolation did not allow for interviews with Mescalero Apache.

Ethnographic data were sought from the surrounding population. These sources were consulted because of their long-time residence in the area, experiences on the reservation, knowledge of administrative and economic conditions, and desire to assist in the recording of Mescalero Apache land-relationships. The sources can be grouped in three categories; one, long-time residents of the area; two, local, state, and federal officials; and three, local residents who have either worked or lived on the reservation in the recent past.
Long-time residents of the area included sons and grandsons of Anglo settlers who arrived in the Rio Tularosa canyon prior to and at the time of reservation assignment. These sources have spent their entire lives on or near the reservation and have worked for the tribe in various capacities. When contacted, they expressed a desire to assist in the project, believing that the settlement and development of the reservation was essential in documenting the rich heritage of the Mescalero Apache people.

The second group of informants are best described as governmental officials who had access to data and information with regard to the economic characteristics of tribal resource development. These sources responded within the Freedom of Information Act and were conscious of the right of the tribe to restrict the public access to certain documents. In all cases, the informants expressed a desire to comply with tribal expectations.

Finally, the last group of informants were local Anglo residents of the area who lived or worked temporarily on the reservation. Their experiences, personal knowledge, and friendship with tribal members made it possible to gather data concerning current trends and expectations within the tribal population. Through these informants it was possible to meet and talk with the Mescalero Apache on an informal basis.

The nature in which data were collected prompted several questions with regard to research ethics and the advisability of working on a research project that included
a unique group that did not wish to be studied. Is it fair to place another human group under a geographer’s magnifying glass? How ethical is a researcher who knowingly studies a group for knowledge of its relationship with the Earth without returning a product in kind? If the group denies access to certain materials and places, what message is the group expressing to the researcher and thereby all others outside the group?

The message from the Mescalero Apache is clear, they consider themselves to be sovereign nation. The reservation is closed to outsiders, even those who profess to seek truth. The quest for truth is not an easy matter; the question of who gains and who loses from the quest falls away in an academic argument. The geographer is trained to observe closely and analyze man’s relationship to the earth. In this case, the Mescalero Apaches’ relationship with land has been observed to distinguish those qualities that have preserved their pre-reservation relationship.

The ethical aspects of the questions still exist. Knowing now the strong preferences of the group, perhaps it would have been best to ask academic questions of another group. The researcher has gained a knowledge and a respect for the Mescalero Apache people. In return, this document exists as a record of the Mescalero Apache’s ability to survive as a unique culture group within American society.

The modern landscape of Native Americans is primarily the result of Indian culture, administration of the trust
relationship, and environmental conditions. Pressure on Native Americans to adapt to American culture has served to remove most Native Americans from their traditional land bases and spatial organization, causing Indian cultural fragmentation. The Mescalero Apache are more fortunate. They inhabit traditional lands and have adapted their reservation and federal policy to pre-reservation spatial organization. This retention of geography is significant in Eastern Apache cultural survival.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The focus of this research, changes in land use and settlement patterns as a process of Mescalero Apache culture change, bridges the two disciplines of cultural geography and cultural anthropology. Both disciplines have contributed to the investigation of cultural preferences evident in human-land relationships, and have developed philosophical and methodological traditions that are most productive when combined (Grossman 1977). This research relies on theories and techniques conceived in both geography and anthropology.

The philosophical and methodological traditions of geography have been defined by numerous authors including James and Martin (1981) and Broek (1965). These writers have defined the discipline and established various criteria for measuring the geography of physical and cultural phenomena. Four traditions of geographic inquiry have evolved: 1) an earth science tradition, 2) an area studies tradition, 3) a human-land relationships tradition, and 4) a spatial tradition (Pattison 1964). This research arises from the third tradition, human-land relationships, and takes its philosophical arguments and methodology from the sub-field of human ecology.
Human ecology, as an aspect of geography, was first defined by Harlan H. Barrows in his 1923 Presidential address to the Association of American Geographers. Although Barrows' intent was to define all geographic inquiry as human ecology, his definition is used primarily by modern human ecologists. As defined by Barrows, human ecology "will aim to make clear the relationships existing between natural environments and the distribution and activities of man" (Barrows 1923:3).

Modern human ecologists continue to investigate the relationships between land and human occupation. Human ecology is divided between systemic studies, and environmental perception, hazards, and responses. In his review of the man-environment relationship literature, Grossman (1977) differentiates between anthropologists, who tend to study man's adaptation to the environment, and geographers, who study man's use of the environment to meet cultural preferences.

This distinction is evident in Native American land studies. Anthropologists have tended to investigate the adjustment of cultural practices and preferences to environments from the Pleistocene to the European contact period. According to anthropological investigations, prior to European contact the majority of Native Americans did not recognize the ownership of land, practiced traditional forms of land use and resource development, and incorporated settlement patterns into cultural preferences.
Geographers have tended to study historic and modern patterns of Indian settlement, subsistence patterns, and patterns of reservation land use. Recently, with the discipline's emphasis on spatial analysis and land use planning, geographers have attempted to investigate and resolve economic conditions on Indian reservations by identifying and analyzing problems of economic geography (Van Otten and Swarts 1979). Perhaps one of the greatest contributions geographers and anthropologists have made to Indian land studies is the publication of numerous atlases and maps (Ferguson and Hart 1985; Goodman 1987; Hilliard 1971) that document traditional location, relocation, and modern location of Indian culture groups.

The potential for geographic research is magnified when patterns of location, land use, and settlement are combined with cultural values and preferences identified by cultural anthropologists. The spatial preferences of a group express a unique set of cultural and economic characteristics (Newton 1974). Changes in the spatial preferences of a culture group may result in significant cultural changes, depending upon group flexibility, environment, and economic resources.

Sutton's Interlocking Themes

While distinctions can be made as to the philosophical bent in Indian land studies by anthropologists and geographers, Sutton defined the areas of overlap between the two groups of scientists. Sutton organized all
geographic and anthropologic work on Native Americans up to 1975 in his book *Indian Land Tenure: Bibliographical Essays and a Guide to the Literature* (1975). The "interrelatedness" of Indian land studies in social sciences is clearly demonstrated by Sutton (Figure 3) (Sutton 1975:13).

Sutton identified three themes in Indian land studies: autonomy and self-determination (Theme A); dispossession and termination (Theme B); and protection and reservation (Theme C). The three themes represent U. S. federal Indian land policy in chronological order. Each theme is qualified by topic. Theme A focuses on aboriginal occupancy and territoriality. Land cessions and establishment of reservations are discussed in Theme B. Theme C combines land administration and land utilization studies.

The three themes appear graphically so that portions of each intersects with the other two. Consequently, the intersection of (A) and (B) produces topics of discussion under original title and land claims. The intersection of (B) and (C) demonstrate title clarification and change. Tenure and jurisdiction become evident in the intersection of (A) and (C). Tenure and culture change exist at the intersection of all three themes (A), (B), and (C).

According to Sutton (1975), Theme A belongs to the disciplines of anthropology and ecology, Theme B is best served by history, and Theme C incorporates sociology, public administration, and law. The intersection of Theme
INTERLOCKING THEMES
of Native American Studies

Figure 3
A and Theme B covers the widest range of disciplines including anthropology, history, law, and land economics. The intersection of Theme B and Theme C is similar to those fields of study listed under Theme C, and the intersection of Themes C and A fall within the scope of law. Finally, the intersection of the three themes is described by Sutton to be best demonstrated by anthropology and the use of the ethnohistoric method.

A closer examination of Sutton's typology reaffirms the need for cross disciplinary research in Native American land studies. If anthropology is included in the social sciences, four out of six possible areas of study include the discipline of anthropology. Topics within anthropology, when combined with geographic topics, become the backbone of Indian land studies.

Sutton does not specifically identify the discipline of geography in the typology. To Sutton, all Indian land studies are geographic in nature: "It is my position... that political and legal factors have contributed most to the demise or persistence of native American culture vis-a-vis the land" (Sutton 1975:201). As a geographer, Sutton expressed the discipline's tradition of examining human-land relationships.

**Human Ecology as A Cross-Disciplinary Topic**

Studies in land use, resource development, and settlement have been topics within the discipline of geography since the distinction of geography as an academic...
discipline (James and Martin 1981). The Berkeley School of geography, founded by Carl Sauer in the 1920s, established the precedent of incorporating geographical and anthropological variables in describing a cultural landscape (Sauer 1963). Sauer and his students developed the concept of chorography as a foundation of cultural geography to emphasize the basic geographic question of "where" culturally unique characteristics were located.

Chorography is regional description of area with an emphasis on cultural features. However, Sauer's use of anthropological variables did not include references to social organization, human behavior, and attitudes and beliefs of culture groups. These aspects of anthropology were added to studies in human ecology by European geographers (Brookfield 1964).

The evolution of cross-disciplinary land studies incorporates the questions "why" and "how" in the analysis of cultural features such that cultural landscape interpretation is process-oriented. Varying degrees of cultural processes influence each landscape. The task for the geographer is to identify the process and its degree of influence on each landscape (Brookfield 1964). Geographers are concerned with unique landscapes and ask not only "where" is the landscape, but "how" and "why" the landscape has originated and changed through time (Spencer and Horvath 1963).

Anthropologists began to raise ecological questions about the same time geographers were searching for social
process theories to explain man-land relationships. The logic of human ecology in anthropology was first expressed by Julian H. Steward (Mikesell 1967). Steward examined the impact of environmental conditions of social organization among non-agricultural groups, including the Shoshone Indians of the Great Plains (Steward 1938). His conclusion is that human ecology must be based on cause and effect, and that the first link in the chain of events is the relationship of the culture to the environment (Steward 1955).

While Steward's theoretical perspective is criticized by geographers for its emphasis on the adaptation of a culture group to a physical environment (Grossman 1977), his methodology serves anthropologists well in explaining social aggression between cultures, changes in populations, and the significance of animals in cultural activities (Mikesell 1967).

Earlier, less convincing attempts to describe the relationship between culture and environment appear in other anthropological works on Native Americans. Wissler (1924) demonstrated a correlation between cultural groups and environmental zones. He believed that the correlation was causal and that physical geography played a major role in the formation of culture groups. More than a decade later, Kroeber (1939) wrote on the same subject, offering detailed evidence of a causal relationship between environment and culture among Native Americans. However, he did not make specific conclusions as to how the causal
relationship worked in order to create unique cultures in distinct areas (Mikesell 1967).

Kroeber and Wissler were criticized by Barth (1956) for being excessively general and taking a regionalist perspective. Barth recommended investigations in human ecology focused upon subsistence problems and relationships. Investigating three cultures in Northwest Pakistan, Barth initiated the concept of niche in human ecology (Barth 1956). As a result of Barth's pioneering study, anthropologists began to research the relationship between culture and environment from a smaller scale, ignoring more regional perspectives.

Mikesell (1967) pointed to one further innovation in anthropological discussions of human ecology during the 1950s. This innovation he attributes to the research of Meggers, who underscored the importance of environmental limitations on cultures. Meggers' work focused on subsistence groups in prehistoric South America and Europe whose environments set limitations on cultural evolution (Meggers 1957). This deterministic view is not acceptable to geographers who discredit the theory of environmental determinism (Sauer 1963; Mikesell 1967).

Comparisons of anthropological and geographic research in human ecology are traceable in more recent studies (Young 1974). Human ecology, as an interdisciplinary method to systems analysis, is necessary to further the understanding of man-land relationships (Young 1974). The systemic approach in cultural geography is best expressed
in the statement: "The cultural geographer is not concerned with explaining the inner workings of culture or with describing fully patterns of human behavior, even when they affect the land, but rather with assessing the technical potential of human communities for using and modifying their habitats" (Wagner and Mikesell 1962:5).

This review of the methodological basis of human ecology demonstrates the parallels between anthropology and geography. Both disciplines offer theoretical examinations that have been proven useful to research and analysis of human-land relationships. The human ecologist, geographer or anthropologist, recognizes social processes as a variable in the formation of a cultural landscape. A cultural landscape includes the adaptation of land by the culture group that occupies the physical environment.

The Process of Culture Change and Cultural Adaptation

The significance of the culture change process is a persistent theme in anthropology. Culture change occurs for a variety of reasons and in a number of ways. The introduction of a different technology or idea, either by invention or diffusion, has the potential of changing the material or non-material characteristics of a culture (Spicer 1952). The process of culture change occurs to varying degrees, dependent upon the strength of those cultures involved in the contact experience. To a varying degree, more than one culture may experience minor changes in a contact situation or the weakest culture may disappear.
altogether. Finally, culture change may be the result of choice or the result of force (Redfield, Linton, and Herskovits 1936).

The response to a change in culture, either of choice or by force, depends upon a culture group's flexibility or ability to adjust to new conditions of place, spatial and social organization, political structures, religious expression, language choice or any other aspect of culture. The ability to adjust to physical and cultural modifications describes a group's ability to adapt (Linton 1936). The process of cultural adaptation is of interest to human ecologists as questions arise concerning the adaptation of new locations, shifts in primary resource use, and re-settlement in response to any degree of culture change (Brookfield 1964).

Twentieth-century Native Americans have been greatly influenced by the contact experience with Euro-American institutions, including land ownership and land use (Sutton 1975). Few studies of Native American adaptation since the advent of Euro-American culture contact and enforcement of historic legislation have identified the significance of Indian spatial organization as a factor in cultural adaptation. A study of changing populations, settlement patterns, and seasonal cycles of activities by the Haida Indians of British Columbia attributes the loss of Haida culture to the reshaping of the spatial variables due to contact with Euro-Americans (Henderson 1978). Henderson's
study clearly identifies the significance of Indian-land relationships as a factor in cultural adaptation.

Henderson's study of Haida employs a method for evaluating the impact of the Euro-American concept of land occupation and land use on Indian landscapes by analyzing the impact of historic events in the administration of the trust relationship (Bohannan and Plog 1967). This research utilizes a temporal aggregation of land occupation and land use of the Eastern Apache to identify a cultural adaptation process.

Federal Administration and Indian Lands

Events in United States legislation and administration have channeled Indian land occupation and use. The enforcement of federal policy has been instrumental in bringing about Native American culture change. Criticism of federal policy as implicit attempts to annihilate or acculturate Native Americans have been noted by most scholars.

Perhaps the most respected scholar and bibliographer of federal Indian policies is Francis Paul Prucha. Prucha has written numerous books, articles, and reviews of the literature. In The Indians in American Society, Prucha (1985) summarized his beliefs and describes the events of federal policy as a continuum beginning historically with paternalism, and moving through dependency, Indian rights, and ending with self-determination. Prucha's conclusion is that federal policies "were full of paradoxes and
anomalies" during the paternalistic and dependency periods, acculturation was not generally successful, and self-determination "has not yet reached fruition. Until it does the American Indians will remain dependent upon a paternalistic government" (Prucha 1981:5).

The specifics of Prucha's argument are borne out in his and in other authors' works describing federal policies and Indian lands. The impacts of federal policies on Indian culture resulted in the loss of Native American independence and equality as a result of Euro-American explicit and implicit actions (Washburn 1972). In most cases, the federal government used treaties, definition of Indian land rights, and enforcement of conflicting federal policy to force Native Americans (Cohen 1937). The federal government knowingly enacted policy that reduced Indian lands with the explicit intention of annihilating Indian culture (Kickingbird and Ducheneaux 1973). In the face of cultural annihilation Indians have become a strong, unique ethnic group within the larger American culture (Washburn 1972).

Specific events in federal legislature created new periods in Indian land uses. Each event has been dissected by a variety of authors. These events have shaped and reshaped all Indian-land relationships during the historic era. The Allotment Act focused on the use of land regulation by the federal government to bring about the process of Indian acculturation (Gates 1886; Otis 1973).
Prior to 1934 Indian policy reform became a popular social movement within the United States. Critics of the allotment policy documented deplorable social conditions on the reservations and the Indians' inability to accept private ownership (Collier 1934; LaFarge 1935; Leupp 1910).

Reformation of the federal policy of Indian culture change occurred with the passage of the Indian Reorganization Act in 1934. The explicit and implicit goal of the Indian Reorganization Act (IRA), also known as the Howard-Wheeler Act, was Indian cultural survival (Kelly 1983). The IRA organized the Indians into administrative tribes and provided tribes with the means of economic development (Smith 1971; Taylor, G. 1980).

The 1952 event in federal policy is one of the darker moments in Indian-land relationships. In 1952, the federal government adopted a policy of tribal and reservation termination. Assuming that the Indians had become self-sufficient and assimilated into American society during the IRA, the government attempted to rid itself of the trust responsibility that plagued earlier events (Fixico 1986; Sorkin 1978).

Critics of the termination and urbanization policy were vocal. The policy was severely criticized for its rejection of Indian land claims and the possibility of a pluralistic American society including Indian cultures (Blumenthal 1955). The criticisms were eventually heard in Washington, D.C., and a fourth event in federal Indian policy occurred in 1974. Self-determination, the present
period in Indian-land relationships, is still in the making (Prucha 1981).

More articles and essays have been written about Indian-government relations since 1974 than any other period (Prucha 1981). Several social conditions have contributed to the voluminous amount of data and analysis published during this period. First, during the late 1960s and early 1970s, Native Americans became aware of the power of the press to promote their demands for civil rights. Second, the cause of Native Americans became popular among young scholars; and third, the federal government increased its own publication rate in defense of federal policy.

Articles on Indian-land relationships now focus on two major issues, land claims and modern Indian land uses. Both topics are specific in area and tribe. Few works, however, summarize the impacts of Self-Determination on Native Americans. As Prucha (1981:80) stated, the policy of self-determination has not matured, thus literature tends to address the policy and not Indian response to the policy.

Eastern Apache Geography and Culture

Research on the Eastern Apache can be divided into three groups. The first group establishes the Eastern Apache pre-reservation culture. The second group identifies Eastern Apache economy and political leadership after reservation assignment. The third group contains reports on cultural, social, and economic conditions by
local Sacramento Mountain residents who observed Indian behavior and land uses since military contact with the Eastern Apache bands.

Three types of anthropological data describing pre-reservation culture exist. The first set of data established the origins and historic location and culture of all Apache groups as Athabascan (Harrington 1940; Perry 1980). The second group describes Apache culture including kinship, leadership, subsistence patterns, religion, and language (Haley 1981; Mails 1974; Bellah 1952; Opler 1969; Basso and Opler 1971). The last set of data includes the culture traits of the three separate bands that now live together on the Mescalero Reservation, the Lipan (Sjoberg 1953), Mescalero and Chiricahua (Hoijer 1938; Castetter and Opler 1936).

Historical data describing location and activities of the Eastern Apache have been thoroughly researched in land claims cases (U. S. Court of Claims 1959). Ethnographic and archival work identify Eastern Apache culture and geography from 1653 to 1883. The data presented before the Court of Claims became the thesis of several articles and reprints of the expert testimony (Basehart 1967, 1971, 1974; Bender 1974).

The development of tribal economy, political organization, resource management, and settlement location after reservation assignment demonstrates the slow but effective process of adapting federally enforced policies to Eastern Apache culture on the reservation (Opler and
Opler 1950; McCord 1946; Ferran 1964). A consistent theme in federal policy enforcement is the slowness of the BIA to provide the Mescalero Apache with the means necessary to accomplish economic and social tasks for cultural adaptation (U. S. Department of Interior 1870-1910; Turcheneske 1978).

The last category of published material includes general works by local residents about the Mescalero Apache Reservation area, accounts by U. S. military officers stationed in the area, local news reporters, old cowboys, and local historians. These contributions are summarized by Sonnichsen (1973).
CHAPTER III

PRE-RESERVATION GEOGRAPHY
OF THE EASTERN APACHE

Introduction
Prior to reservation assignment, the Eastern Apache occupied an area of the American Southwest and northern Mexico. Their culture reflected the harsh environmental conditions of these areas. The Eastern Apache subsisted as hunters and gatherers in a region known to seventeenth century Spanish explorers and missionaries as Apacheria. Cultural preferences for certain land use are documented by several authors and in U. S. Court of Claims (1959) expert testimony for all of the Eastern Apache bands. Mescalero Apache subsistence patterns were identified by Basehart (1974).

Apacheria
The physical and cultural geography of Apacheria, the region of Apache domicile at the time of European contact, is located in southern Arizona and New Mexico, and northern Sonora and Chihuahua (Figure 4). Crossed by the Rio Grande and bordered by the Gila, Colorado, Pecos, and Yaqui Rivers, the region encompasses an area of approximately 450,000 square miles.
The physical geography is best characterized as a semi-desert. Continental and localized patterns create a region of relatively harsh environmental conditions. These conditions prevailed during the period of Apache occupation prior to European contact.

The continental location of Apacheria figures in the physical geography of the region in two aspects: landforms and climate. The region is dominated by a west coast high pressure system that dominates air flow, air moisture, and air temperature. As a result, the region experiences descending dry air, and greater diurnal temperature changes than changes in seasonal temperatures.

Recent continental orgenies in the region have created fault-block mountains to a maximum height of 12,000 feet rise above plateaus and basins of 4,000 feet minimum elevation. Ancient and relatively young isolated volcanic extrusions are also found in the region. Surface topography has been formed by recent fluvial processes.

These continental characteristics are tempered by local conditions of aspect, soil development, elevation gain, and moisture availability. In general, mountain ranges and associated basins in Apacheria have a north-south axis, thus the aspect of slope is influenced by direct sunlight given the region's location between latitudes of 27 and 38 degrees north. Soil development in the region is generally poor with clay and stoney conditions.
A rise in elevation occurs as the topography changes from basal to mountainous conditions in Apachería. The Sacramento Mountains rise to a height of 12,003 feet above sea level. The mountains are paralleled on the west by the Tularosa Basin at 5,000 feet above sea level, and on the east by the Pecos basins at 4,000 feet above sea level. Consequently, temperature and precipitation patterns change dramatically across the region depending upon elevation. Higher elevations, despite increasing solar radiation, have cooler day-time and night-time temperatures than lower elevations. Precipitation falls more often, and in the form of snow during winter, at higher elevations. These thermal and moisture gradients create a physical landscape of altitudinal zonation.

The conditions of altitudinal zonation are evident in the variety and distribution of biological zones. Low basins are dominated by desert conditions. With increasing elevation, woodlands, Rocky Mountain montane forests, and subalpine forests are found. Floristic and faunal characteristics typical of each biological zone are evident in the region.

This was the physical environment that southerly migrating aboriginal peoples found following the Pleistocene epoch. More than one native group has occupied the region since the close of the Ice Age. The origins of the Apache, or "the people," are traced to early Athabaskans who migrated south from western Canada in approximately A. D. 1000 (Perry 1980).
The Athabascan immigrants split into the two modern culture groups of Apache and Navajo. The Apache lived on the Great Plains until they were crowded out by the Comanche in the late 1600s (Perry 1980:281). The Navajo Indians moved westward, and today occupy a large area in the "four corners" land of Utah, Colorado, Arizona, and New Mexico. It has been estimated that in 1700 Apacheria was inhabited by approximately six thousand Indians who recognized mutual social characteristics and cultural ties as Apaches (Thrapp 1967:viii).

Although culturally similar, modern Apaches are divided into two groups by geographic location. Large clans of Apaches, occupying the southern Arizona and northern Sonoran area, are called Western Apaches. Their culture was influenced by neighboring Pueblo Indians and the Navajo. Today, the San Carlos and White Mountain Apache Tribes are the descendents of these earlier clans.

Clans occupying the eastern half of Apacheria—New Mexico and northern Chihuahua—include small numbers of Mescalero, Chiricahua, Lipan, and Jicarilla. Together these clans comprise the Eastern Apache. These clans, due to their proximity to the Great Plains and their ties with the Plains Kiowa Apache, retained hunting and gathering traditions of Plains Indian culture. Modern tribal formation distinguish the Jicarilla and Mescalero. The Chiricahua and Lipan are ancestral clans of Apache who reside with the Mescalero on the Mescalero Apache Reservation in southern New Mexico (Opler 1983).
Subsistence changed in Apacheria with the advent of the horse. The mobility afforded by the use of horses allowed the Apache access to goods by raiding. Raiding caused considerable trouble for immigrating Euro-Americans throughout the Southwest. Bellah asserts that Indian confinement to reservations in the Southwest was not so much to restrict Indian-white contact, but to stop raids and warring among the Indians themselves (Bellah 1952).

Pre-reservation Subsistence Patterns

The Mescalero, Chiricahua, and Lipan Apache had common subsistence practices. Subsistence traditions of the Eastern Apache reflected the harsh environmental conditions of the arid Southwest and a loosely organized band structure. Survival depended upon the ability to gather plants and animals in an area diverse enough to provide foodstuffs throughout the year (Opler 1983:419).

The mountainous, arid environment was divided between brush, grassland, woodland, and forest. Each zone afforded the gathering of plants and the hunting of animals at varying elevations. The general proximity of subsistence items was identified by ethnographic sources in Basehart’s 1974 study of Mescalero Apache subsistence patterns (Figure 5).

According to the sources, lower elevations (2,000 feet to 4,500 feet) of brush and grassland produced annual crops of mesquite and grasses that attracted small rodents and peccary in southern locations. Higher elevations (4,500
feet to 9,000 feet) of woodland and forest cover produced greater quantities of foodstuffs gathered and hunted by the Eastern Apache. Woodland vegetation included mescal (from which the name Mescalero originates), sotol, datil, juniper, pinon, oak, chokecherry, raspberry, and red elderberry.

Game animals of the higher elevations provided adequate protein content in the Eastern Apache diet. Deer were the most plentiful game and were hunted by the Indians throughout the year, although fall kills were preferred for quantities of meat and quality of hides.

Bison were also important protein sources for the Mescalero. Hunting bison required organization, support, movement to the Plains, and a change in hunting technique. A bison hunt was an event of some magnitude in Mescalero seasonal subsistence practices and contributed greatly to the overall food gathering activities of all Eastern Apache groups.

Of lesser importance was the hunting of antelope, elk, mountain sheep, bobcat, bear, and wolf. Antelope were the most plentiful of this group. Because elk, mountain sheep, bear, and wolf were scarce and found only at higher forest zones, their contribution to the Eastern Apache diet was less important.

Plants, gathered in season by women, required little to extensive preparation. For example berries and nuts required little preparation; while mescal, required three to four days to harvest and prepare for consumption and
storage. Plant gathering was done in conjunction with hunting. As plant crops and game became available, the bands moved from zone to zone taking advantage of each food source.

Despite the seemingly random traverse across Apacheria, Eastern Apache bands did follow general routes. The movement of eight Mescalero leaders and their bands have been documented and two patterns of movement have been identified, major seasonal migrations (Figure 6) and small-scale movements associated with local hunting and gathering activities. These patterns of mobility typified Eastern Apache use of an extensive area of the American southwest.

The contribution of horses and the benefits of raiding in Eastern Apache economy is unknown. Informants generally were not willing to discuss their raiding practices. Horse ownership was an individual matter, and the number of horses owned by individuals varied greatly. An individual's raiding abilities were but one method in obtaining foodstuffs.

One scholar has described the organization of subsistence activities as a resource-holding corporation (Basehart 1967:277). In gathering subsistence goods, no Eastern Apache had exclusive rights to any one particular resource or area. All goods were accessible by any individual or band that found and exploited food resources. When more than one band discovered a supply of food, all had equal rights to the resource, even if one
MAJOR MOVEMENTS OF MESCALERO LEADERS

Figure 6

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band had arrived at the site prior to the others. According to Basehart (1967:287), the corporation was "a jural entity, with individual members considered shareholders in this entity . . . defining resources as common property of all Eastern Apache."

Band Organization and Political Leadership

The success of food harvesting depended upon yearly environmental conditions, and the ability of each band to locate and gather plants and animals. While environmental conditions could not be managed by the Indians, band leadership and ability to identify and collect crops was controllable. Those leaders who successfully identified areas of food resources and led productive hunting parties remained in a leadership role (Basehart 1971).

Political organization was flexible and a leader's tenure was based upon his skill and wise decision-making. A leader was replaced when his ability to provide for the band was questioned. Roles of responsibility were clearly defined. Men performed hunting duties while women spent the majority of their time gathering and preparing plants to eat (Basehart 1971:40).

Band leadership and organization was the strongest political unit in pre-reservation society. The bands were loosely organized and leaders were selected on their abilities to provide for and protect the band. Membership in a band was also flexible and individuals could move from band to band. Movement was not restricted to one area, and
an Eastern Apache male could move his family as he pleased. No restrictions on geographic location of bands or individuals existed but proximity to bands related by kinship was preferred.

Castetter and Opler (1936) distinguished two Mescalero bands, "Edge of the Mountains People" who preferred to reside in the vicinity of the Sacramento and Sierra Blanca Mountains, and the "Plains People" who favored lower elevations. These two groups were separated only by distance. Their culture, language, and customs were similar.

Pre-reservation Chiricahua Apache included three distinct bands who were separated by location but not by culture. Each band has earned a reputation in American history for fierce fighting and strong leaders. The first of the three groups was the Warm Springs, or "Red Paint People," who, at the time of U.S. military contact, was led by Victorio. The second band was the "Rock Pocket People." Led by Cochise, this band controlled Apache Pass in eastern Arizona and resisted U.S. military forces in the area until 1872.

The third band, "Enemy People," resided in Old Mexico and seldom ventured into American territory. Geronimo was a member of this band (Castetter and Opler 1936). His activities in Apacheria at the time of U.S. military control are well known (Ray 1974).

The Lipan were once part of a larger clan that included the Jicarilla. Due to hostilities with the
Comanche, the clan split into two units; the northerly unit formed the Jicarilla bands and the southerly unit formed the Lipan band. Small numbers of Lipan occupied areas in west Texas along the Rio Grande where they fought with other Indians. Band leadership and organization resembled that of Mescalero and Chiricahua (Castetter and Opler 1936).

**Kinship**

An additional pattern in Eastern Apache culture that figures into land use and residence is preference of location because of kinship. The Mescalero, Chiricahua and Lipan Apache were matrilocal (Castetter and Opler 1936). When a girl married, the husband, if outside the band, came to live with the girl's band. The young family could leave the band at any time, but generally the family remained in proximity to the girl's elders and siblings.

The advantage of this residence system was the security it received from the extended family. Gathering could be continued with established work partners. The girl was also afforded the protection of her family from any abuse that could result in the marriage (Opler 1983).

**Sacred Places**

Specific mountains within eastern Apacheria were considered to be sacred places by the bands. Mountains recognized as sacred include Sierra Blanca, Oscuro Peak, Guadalupe Mountain, and the Davis and Chiricahua
Mountains. The mountains were believed to contain supernatural powers and the homes of mountain spirits. The mountain spirits were entreated to protect the Indians from disease and attacks by unfriendly groups. In times of doubt and requests for supernatural guidance members of the bands sought instruction and visions on the mountains (Opler 1983).

One of the most important ceremonies in Eastern Apache culture was the puberty ceremony for young girls. The ceremony was usually held at a favored camp-site. Four days of instruction, prayers, and celebration marked the entrance of the girl into womanhood. The grandmother of the girl had the most significant role in arranging the ceremony and verifying the ceremony's authenticity (Castetter and Opler 1936).

Common Places

Three types of places were significant in the day-to-day life of the bands. In long-term migrations the Mescalero recognized boundary places, points past which they did not travel. Regional boundaries were delimited from past encounters with non-Apache speakers. Camp sites were important places always associated with the availability of water. Finally, the Apache recognized central places that were preferred sites of meeting and protection. These sites were located at well-watered places including Rio Grande, Rio Hondo, Rio Ruidoso, and the Pecos River. The sites were characterized by constant
use by Eastern Apache seeking refuge or community (Basehart 1974).

**Places Avoided**

In Eastern Apache culture, death was a terrible event and all precautions were taken to avoid any place where a death occurred. Following a death, the body was buried immediately, the possessions of the deceased were destroyed, and the camp-site abandoned. The deceased person’s name was not mentioned and any reference to the person was ignored (Castetter and Opler 1936).

Other places avoided by the Eastern Apache included sites where a bear, owl, or snake had been encountered. These animals were believed to foretell death or contain the spirit of a deceased person. Any interference with the animals cast an omen upon the observer (Castetter and Opler 1936). These avoidance traditions are evident in modern Eastern Apache culture.

Knowledge of traditional culture and geography of the Eastern Apache have been researched by only a few anthropologists. Using field observations and historical research, Castetter, Opler and Basehart, and a few others have documented the locations, subsistence patterns, socio-political organization, kinship ties, and place orientation of the bands from field observations and historical research. Their conclusions verify the similarity of traditional Eastern Apache culture among the three dominant clans.
The Mescalero, Chiricahua (except for those Chiricahua who now reside in Oklahoma), and Lipan now form one tribe under the name of Mescalero. Mescalero Apache were isolated to some degree by their occupation of the center of Apacheria and their more passive nature compared to surrounding Chiricahua and Lipan.

Eastern Apache hunting and gathering patterns, political organization, and place preferences continued until the three clans were confined to military forts and reservations by the American government. The physical geography and human occupation of Apacheria prior to 1852, with particular reference to the harsh environment and the Eastern Apache, directly contribute to the process of culture change by the modern Mescalero Apache Tribe. Modern Mescalero Apache, with ancestral traditions of hunting and gathering and raiding, use their current reservation lands in ways similar to their pre-reservation culture. Thus modern land uses, resource management and settlement patterns on the Mescalero Apache Reservation are measures of the past, present, and future methods of Mescalero Apache survival.
CHAPTER IV

RESERVATION OCCUPATION AND
SPATIAL ORGANIZATION, 1883-1952

Introduction

The cultural landscape of the Eastern Apache is influenced by the enforcement of federal Indian land policy, finite reservation area and environmental constraints, Eastern Apache cultural preferences, and American economic and social conditions. These factors are significant elements in the process of Eastern Apache culture change.

As Sutton (1975:201) has indicated, American Indian culture has received a great amount of pressure from the federal government to conform to American culture vis-a-vis land occupation and land use. With each change in federal land policy, Indians experienced radical shifts in the administration of the trust relationship. Each shift can be used to measure culture change (Bohannan and Plog 1967).

The five major events that have affected the Eastern Apache are reservation assignment by executive order in 1883, the Allotment Act of 1887, the Indian Reorganization Act of 1934, the policy of termination in 1952, and the Self-Determination Act of 1975. Each event has had a significant effect on Eastern Apache culture change.
Adaptive use of federal policies by the Eastern Apache are evident in the spatial organization of the reservation.

Reservation Assignment

The Eastern Apache were considered to be the fiercest Indians in the Southwest (Ray 1974). Indian assaults on Euro-American immigrants checked permanent settlement in the region for nearly one hundred years. Inevitably, the better equipped and more numerous Americans overwhelmed the Apache leaders Geronimo and Cochise (Thrapp 1967). Reservation life became a reality for the Eastern Apache (Mescalero and Lipan bands) and confinement to an area much more restricted than Apacheria was a traumatic episode in Eastern Apache history.

Between 1855 and 1883 the location and size of the proposed reservation changed with current events and representatives of the government. On March 24, 1883 the modern boundaries of the reservation were established by Executive Order (Figure 7). Subsequent minor changes in the boundaries occurred until 1912, when the current boundaries were authorized by President Roosevelt.

Environmental Setting

Located in the Sacramento Mountains of the New Mexico Central Highlands, the environmental setting of the 470,280 acre reservation is characterized by environmental conditions that constrain certain land uses. As in many United States-Native American treaties, the native
Figure 7
population was placed on land that was unattractive to agriculturally-oriented settlers. The Eastern Apache were assigned to a mountainous, arid location where land suitable for agricultural purposes was extremely limited and undesired by Anglo settlers.

The Sacramento Mountains rise abruptly above the Tularosa Basin exposing a fault scarp ranging between 1200 feet and 7,000 feet along the western face of the orogeny. The eroded eastern flanks create a dissected topography that adjoins the Southeastern Plains of New Mexico. The average elevation of the reservation is 7,000 feet, the higher elevations are located along the western fault scarp and the lower elevations are located on the eastern third of the reservation (Figure 8).

The topography is broken by six major drainages that radiate away from the Sacramento Mountain crest. These drainages have created steep-sided, narrow valleys. The widest valley is located at Whitetail. The average width of Whitetail Canyon is .5 miles, with a maximum width of 1.0 miles. Rio Tularosa forms the next widest canyon with an average width of .35 miles and a maximum width of .6 miles. The third-ranked canyon is Elk-Silver with an average width of .2 miles and is .4 miles at its widest point. The three remaining canyons, Three Rivers, Nogal, and the South Fork of Rio Tularosa, are shorter and narrower than the others canyons described. The narrow canyons do not allow for long periods of sunlight necessary
for agricultural land uses, and were therefore unattractive for settlement.

The rugged topography also constrains the development of soils (Figure 9). Loamy soils are located only in drainages while the remaining reservation soils are undeveloped (Neher 1976). The majority of the soils are shallow clay loams. The lack of soil development further limits the possibility of intensive agriculture on the reservation.

Intensive agriculture is also limited by climatic conditions. Southeastern New Mexico is within the semidesert climatic region of western North America. Thermal and moisture conditions are controlled by a constant high pressure zone and monsoons. These conditions are compounded by the relatively high elevation of the reservation.

The higher elevations of the reservation receive more than 34 inches of precipitation a year, while lower points receive less than 10 inches (Figure 10). The western portion of the reservation receives precipitation both in the form of snow and rain. Precipitation on the eastern, leeward portion of the reservation nearly always falls as rain. The lack of precipitation during a growing season or over a period of years has a significant impact on agricultural production. Flooding, because of intensive rainfall or sudden snowmelt, has not been reported.

The thermal regime is dominated by consistently cool temperatures throughout the year (Table 1). The average
TABLE 1: AVERAGE MONTHLY TEMPERATURES
RUIDOSO, NEW MEXICO

<table>
<thead>
<tr>
<th>MONTH</th>
<th>AVERAGE TEMPERATURE (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>36.5</td>
</tr>
<tr>
<td>February</td>
<td>38.3</td>
</tr>
<tr>
<td>March</td>
<td>42.1</td>
</tr>
<tr>
<td>April</td>
<td>49.6</td>
</tr>
<tr>
<td>May</td>
<td>54.4</td>
</tr>
<tr>
<td>June</td>
<td>60.3</td>
</tr>
<tr>
<td>July</td>
<td>63.2</td>
</tr>
<tr>
<td>August</td>
<td>63.7</td>
</tr>
<tr>
<td>September</td>
<td>57.8</td>
</tr>
<tr>
<td>October</td>
<td>48.0</td>
</tr>
<tr>
<td>November</td>
<td>39.6</td>
</tr>
<tr>
<td>December</td>
<td>32.8</td>
</tr>
<tr>
<td>Annual</td>
<td>48.9</td>
</tr>
</tbody>
</table>

temperature during the summer growing season is 62.4 degrees (F). Winter temperatures average 37.4 degrees (F). On an annual basis, the average temperature is 48.9 degrees (F). These thermal conditions limit intensive agricultural land uses.

Conditions of elevation, aridity, and thermal averages are visible in structure of the natural vegetation. The highest elevations are characterized by sub-Alpine conditions. Forests typify the central mountainous regions on the reservation. The low, eastern reservation elevations are grasslands. Floristic indicators at the higher elevations are predominately ponderosa and pinyon pine. Juniper and grasses dominate at lower elevations (Figure 11).

In summary, the reservation's physical setting is constrained by relatively high elevations, poor soil development, year-round cool temperatures, and limited precipitation. The natural vegetation reflects these conditions and is described as a transition zone between Hudsonian and Lower Sonoran vegetative structure. Bailey (1913:1) emphasized these conditions in his analysis of life and crop zones of New Mexico when he states that the Central Highland zone is inadequate for intensive agricultural purposes.

While environmental conditions constrained the conversion of land to intensive agriculture by Anglo settlers and the native population in the past, the forest and range conditions would prove to be attractive for
extensive agricultural purposes by both groups over time. Forest reserves and range are the only known resources on the reservation.

Cultural Setting

The reservation was created by Executive Order for four reasons: (1) to limit Eastern Apache contact with settlers by separating the two groups; (2) to protect the settlers from Indian attack by placing the reservation in close proximity to a military fort; (3) to encourage Eastern Apache acculturation; and (4) to satisfy Indian demands for land that would allow them the freedom to practice traditional subsistence patterns (Harris and Carlisle 1985). The reservation is within the traditional, pre-reservation territory of the Eastern Apache bands, and was the center of hunting and gathering activities prior to reservation assignment (Basehart 1974:10). Traditional meeting places and camp sites are located within the reservation boundaries, as well as the sacred Sierra Blanca.

Reservation settlement was successful from the standpoint of providing the Eastern Apache with traditional lands, but the goal of separation from white settlers was not achieved. Violent contact between the two groups continued because of differences in ownership beliefs, white squatters on the reservation, and lack of arable land for Anglo and Indian farming (Harris and Carlisle 1985).
The root of the problem was the lack of evenly distributed water resources.

In determining the reservation’s final boundaries the federal government, perhaps unwittingly, set aside major water sources and drainage in southeast New Mexico for Indian, not white, use. Competition for available water in Tularosa, Ruidoso, Bonita, and Hondo Canyons set the climate of relations between Indians and settlers. Minor boundary changes after 1883 were intended to protect watersheds and to provide water supplies for both groups.

Despite compromises by both Indians and whites, relations between Indians and settlers remained strained. In many ways, this tension continues to typify the relationship between modern Eastern Apache and non-Indian residents of southeastern New Mexico and western Texas (Shepard 1987).

Attempts to promote culture change among the Eastern Apache by promoting agricultural activities were less successful. Tradition and a restrictive natural environment deterred initial acculturation programs. Instead, the Eastern Apache learned to depend upon the government to meet their immediate needs. Four years after reservation assignment, the Eastern Apache were faced with federal legislation that reinforced culture change.

The Allotment Act of 1887

The first federal policy to state specifically the conditions of Indian land use was the Allotment Act of 1887.
(Taylor, T. 1972). Previous federal policy separated Indians and whites by region and association. The Allotment Act was endorsed by members of Congress and the Indian Service. Both groups were convinced that Indian self-sufficiency could only be achieved by the Indian adoption of farming skills as practiced by Anglos in the United States.

To accomplish this goal, politicians and bureaucrats devised a system under the Allotment Act whereby Indian heads of families would receive 160 acres. The purpose of the Indian land assignment system was to provide solutions to two pressing problems in the later half of nineteenth century American politics: (1) it would rid the U. S. government of the perceived "Indian problem"; and (2) unassigned Indian lands could be opened to Anglo settlers who were increasing their demands for western land (Otis 1973).

The Allotment Act was successful from the point of opening land for settlement, but it did not release the federal government from its trust relationship with the Indians. Application of the Allotment Act opened 120 million acres of reservation land for white settlement. The acreage accounted for nearly half of all Indian lands in the West. The remaining reservation lands were either not open to settlement or were not claimed by settlers, eventually returning to federal trust status (Kickingbird and Ducheneaux 1973).
The Allotment Act was not consistently applied on all reservations and the Indians lacked capital resources and a distribution system for farm products. The reasons for its inconsistent application are apparent once the distribution of allotted versus unallotted reservations is examined. Reservations in the Great Lakes States and the Pacific Northwest were allotted while most Southwest reservations were not. Perhaps the Southwest reservations were not allotted because the landscape was so desolate that Anglo settlers did not take an interest in the land (Taylor, G. 1980).

In the case of the Mescalero Apache Reservation, the physical setting and environmental conditions played a major part in dissuading Indian Service officials from enforcing the Allotment Act. Mescalero Agency and Indian Service annual reports found in Department of Interior provide a clear picture of the decision-making process that led to non-allotment. Of primary importance was the amount of reservation land available for cultivation.

In 1894 the agent, Captain Levi F. Burnett, reported "the amount of land which can be irrigated is so small that what they (Indians) raise does not help them much" (Burnett 1894:206). Of 500 tillable acres, only 327 were in production. The average farm size was five acres. Burnett recommended that reservation land cultivated by white squatters be returned to the Indians before allotment would be a real possibility of survival for the Apache (Burnett 1894).
From 1895 to 1897 Agent Captain V. E. Stottler encouraged Indian culture change and insisted that Indians work for rations (Stottler 1897a). He instituted gardening and forced the Indians to be as self-supportive as possible. Work projects organized by Stottler included fencing of land, improvement of the irrigation system, land clearing, and the planting of crops. Government support was cut off to any Indian who refused to work (Stottler 1895; 1896; 1897b).

Rationing of goods was performed on a biweekly basis between 1875 and 1898, despite Stottler's claims of the almost total elimination of rationing (Stottler 1897b). Agency reports suggest the subsistence of the Eastern Apache was dependent upon government rations of beef, cornmeal, coffee, flour and sugar. Cornmeal was issued as a substitute for corn which the Indians used to manufacture tiswin, a popular alcoholic drink (Stottler 1897b).

In 1897 Stottler recommended allotment whereby boundaries of each family's possession would be insured so as to give them assurance of permanency (Stottler 1897b). Stottler's recommendation for reservation allotment was acted upon by the U. S. House of Representatives, who instructed the Department of Interior to allot the reservation upon receipt of a favorable inspector's report (U. S. House of Representatives 1900).

The report was written by Walter Luttrell, Apache Agent in 1900. In his extensive report of possibilities for allotment, Luttrell concluded that the reservation
could not support intensive agriculture because of the lack of irrigable land. The Indians were partially self-sufficient because they grazed cattle and sheep on the forest portions of the reservation. Further, the Indians did not want allotment and asked the government to protect the Tularosa watershed by retaining the reservation intact (Luttrell 1900).

Agent Luttrell demonstrated a concept of watershed conservation to protect Apache water rights and ensure limited farming on the reservation. His contention was that to open the reservation by allotting land to Indians would have a negative effect on water availability, and on the ability of individual Indians to farm the lower portions of the reservation.

The Mescalero Apache Reservation was not allotted based on Special Agent Luttrell's report. His conclusion, that the reservation's physical environment would not support families by farming, provided sufficient evidence against allotment. Allotment of the reservation would be inconsistent with the emphasis of the Allotment Act on Indian self-sufficiency based upon adaptation of intensive agriculture.

Agent Luttrell concluded in his 1900 report that the reservation was ideally suited for grazing and that it contained thousands of acres of virgin timber. The potential income from grazing and timber harvest could be used to support the Indians (Luttrell 1900). However, the Mescalero and Lipan refused to work, and their primary
means of support were government rations, and to a lesser degree traditional hunting and gathering, and gardening in that order (Luttrell 1900).

From Rations to Resource Management

The management of the reservation's resources for the benefit of the Indians became the major concern of the superintendent and agency personnel once it was decided to allow the reservation to remain as a single unit. Since individual farming was not possible because of environmental factors, Indian self-sufficiency became a problem of communal resource management and allocation of goods and services.

The amount of land under cultivation increased between the years of 1897 and 1915 (Table 2). Wheat, corn, oats, barley, and garden vegetables were the primary crops grown. The dollar value of crops increased yearly (Commissioner of Indian Affairs 1915).

An additional ingredient in the changing patterns of Eastern Apache subsistence was the adoption of livestock. In 1883 no grazing by Indian-owned livestock was reported. By 1915, however, slightly over 46 acres were grazed by Apache livestock and 350,000 acres were leased to non-Indian cattle operators. The Mescalero and Lipan had an increasing interest in livestock (Table 3).

Livestock production rapidly became the primary source of revenue for the Indians. Efforts were made to improve the quality and quantity of sheep, goats, and cattle.
TABLE 2: AGRICULTURAL PRODUCTION, 1897 - 1915
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ACRES</th>
<th>PRODUCTION</th>
</tr>
</thead>
</table>
| 1897 | 700   | 250 bushels wheat  
|      |       | 715 bushels corn  
|      |       | 5450 bushels oats, barley  
|      |       | 200 bushels garden vegetables |
| 1898 | 800   | $1000 worth of produce |
| 1899 | 1000  | $1300 worth of corn, oats, barley, wheat, potatoes, and garden vegetables |
| 1903 | 1000  | unreported |
| 1911 | 1100  | unreported |
| 1912 | 1120  | unreported |
| 1915 | 1820  | unreported |

Sources: Stottler, 1897b; Annual Report of the Commissioner of Indian Affairs, 1915.
### TABLE 3: NUMBERS OF RESERVATION LIVESTOCK, 1884-1915  
**Mescalero Apache Reservation**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>LIVESTOCK</th>
</tr>
</thead>
</table>
| 1884 | 500 horses  
       | 250 cows   |
| 1885 | 500 horses  
       | 250 cows   |
| 1887 | 500 horses  
       | 250 cows   
       | 20 yoke of oxen |
| 1889 | 300 cows   |
| 1890 | 700 horses and mules  
       | 400 cows   |
| 1895 | 25 cows    |
| 1899 | 1000 horses  
       | 5000 sheep  
       | 60 goats    
       | 10 cows    |
| 1902 | 500 horses  
       | 100 goats   |
| 1911 | 14000 sheep  
       | 200 cattle   
       | 1200 horses  |
| 1912 | $8,731 for mutton  
       | 30,500 pounds of wool |
| 1913 | 1100 horses  
       | 220 cattle   
       | 14150 sheep and goats |
| 1914 | 900 cattle   |
| 1915 | 2000 cattle  
       | 850 horses   
       | 7000 sheep and goats |

**Sources:** Llewellyn, 1883, 1885; Cowart, 1888;  
Annual Report of the Commissioner of Indian Affairs, 1915
Further, revenue earned from the leasing of reservation lands to non-Indian livestock producers increased the annual incomes of many Mescalero and Lipan Apache.

The success of the early reservation years was hampered by environmental conditions, the older population's resistance to change, and disease. The preference for traditional subsistence and settlement patterns was encouraged by older Indians, particularly grandmothers, who disliked the agency's insistence to acculturate. The grandmothers restricted the Indian youths' attendance in the agency school, discouraged the adoption of gardening, and refused to accept log cabins as an alternative to their wickiups and teepees.

Between 1903 and 1905 light rain and heavy snowfalls reduced agricultural production to almost nothing. Tuberculosis became a major cause of death among the reservation's younger population, blamed by the grandmothers on over-crowded conditions at the agency school and poor ventilation in Indian housing built by the Indian Services. The loss of the younger Apache while at the school reinforced the grandmothers' opposition to government intervention and education programs (Commissioner of Indian Affairs 1904:251).

Not until 1911 were economic gains evident again on the reservation. In 1912, according to McCord (1946:39) the total income from all sources was $43,330, divided among the following sources in order of their monetary importance: crops, wages from employment, lease rentals.
per capita trust fund payment, ration work, arts and crafts, and the individual proceeds of miscellaneous labor on and off the reservation.

Of the estimated 9,000 acres of arable land on the reservation (SCS 1936), 1,120 were under cultivation by ninety men. Fifty Indians were engaged in basketry, bead work, wood cutting and other associated crafts. The government employed 200 Indians, some working for direct relief in the form of rations (McCord 1946:40).

As part of the lease rental trust fund revenue, the Eastern Apache earned revenue from grazing permits. In 1913 the superintendent reported the grazing permits (Table 4). Not only was the permittee recognized, but the location and duration of the permit was recorded. All the permits expired in 1913 (Jefferis 1913).

The year 1913 is significant for two reasons: first, it begins the period of settlement on the reservation by the Chiricuhua band of Apache who had previously been restricted to Fort Sill, Oklahoma; and second, the demand for beef brought on by World War I. These factors, and the end of the cattle permits, allowed for significant changes in land use patterns.

The Beginnings of the Livestock Industry

A livestock industry on the reservation, run solely by the Eastern Apache, is suggested in a letter to the Commission of Indian Affairs by Superintendent C. R. Jefferis dated August 23, 1913. Jefferis' reasons
### TABLE 4: RESERVATION GRAZING PERMITS, 1913

<table>
<thead>
<tr>
<th>PASTURE</th>
<th>PERMITTEE</th>
<th>NO. OF HEAD</th>
<th>PERMIT EXPIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>C.M. deBremond</td>
<td>8000 sheep</td>
<td>4/30/13</td>
</tr>
<tr>
<td>No. 2</td>
<td>L.B. Tannehill</td>
<td>2500 cattle</td>
<td>4/30/13</td>
</tr>
<tr>
<td>No. 3</td>
<td>S.S. Ward</td>
<td>3000 cattle</td>
<td>4/30/13</td>
</tr>
<tr>
<td>No. 4</td>
<td>S.S. Ward</td>
<td>500 cattle</td>
<td>6/30/13</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>J.B. Wingfield</td>
<td>200 cattle</td>
<td>4/30/13</td>
</tr>
<tr>
<td>Eagle Creek</td>
<td>J.H. Phillips</td>
<td>50 cattle</td>
<td>8/31/13</td>
</tr>
</tbody>
</table>

Source: Jefferis, 1913
for instituting an Indian cattle operation are both economical and philosophical. Philosophically, Jefferis was committed to Indian self-sufficiency. He states in his letter, "There exists an absolute moral and legal obligation to these Indians to stock the reservation with their own cattle" (Jefferis 1913). Once establishing the necessity of a cattle enterprise, Jefferis requested the amount of one million dollars to stock the reservation with cattle, improve the waterings, build necessary fences, construct permanent roads, and erect houses for "all the Indians on their little ranches" (Jefferis 1913:1).

Jefferis obviously hoped to encourage self-sufficiency by introducing extensive agriculture rather than intensive agriculture as the Allotment Act prescribed. A sense of urgency can also be found in Jefferis's letter. His comments indicate that owing to recent crop failures, the Indians needed economic relief as soon as possible (Jefferis 1913).

The initiation of a cattle industry on the reservation was viewed by agency personnel as the only hope for Indian prosperity. In a second letter sent to the Commissioner of Indian Affairs on August 25, 1913, Jefferis states "the launching of these people in the cattle business appears to be the only hope they have for future prosperity" (Jefferis 1913:1).

Jefferis proposed that the undertaking of a cattle operation be strictly a business venture, managed with the best business methods available. He made several
recommendations with regard to the potential cattle operation and provided a perspective of the cattle industry of the Sacramento Mountains in the early 1900s.

Jefferis' first recommendation was that the Indians hire a cattleman, "a man who not only knows cattle but who has had business experience and training" (Jefferis 1913:2). The cattleman was to be given a free hand in all management decisions. The superintendent was to find such a man and turn all matters of the cattle operation over to him.

The cattleman was to hire and supervise a crew, manage the cattle operation through-out the year, and submit an annual report to the Eastern Apache. The first cattleman was hired in 1914 at a yearly salary of $3,000. Superintendent Jefferis further recommended a budget for the initial investment in a cattle operation (Table 5).

The proposed budget suggests several characteristics of a beginning cattle operation in the Sacramento Mountains in 1913. First, Mexican steers were sought, because American cattle breeds could not withstand the arid climate and the lack of lush vegetation. The introduction of Mexican strains insured the survivability of the cattle herd.

Second, a surplus of horses (broncos) was necessary to supply a work crew of 13 men, assuming the cook did not own a horse. Horses were the primary tool of the cowboy. Without a strong horse, a cattle operation would be put to a halt, consequently extra horses were always kept on hand.
**TABLE 5: MESCALERO APACHE TRIBE LIVESTOCK CAPITAL INVESTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT PRICE</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIVESTOCK (Investment)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 steers, 3 years old, Mexican stock</td>
<td>$43.</td>
<td>$12,600.</td>
</tr>
<tr>
<td>900 cows, 3 to 6 years old, native stock</td>
<td>$50.</td>
<td>$45,000.</td>
</tr>
<tr>
<td>54 bulls</td>
<td>$100.</td>
<td>$5,400.</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td></td>
<td>$63,000.</td>
</tr>
<tr>
<td><strong>EQUIPMENT (Investment)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 saddle horses</td>
<td>$100.</td>
<td>$1,200.</td>
</tr>
<tr>
<td>- 12 broken</td>
<td>$75.</td>
<td>$600.</td>
</tr>
<tr>
<td>- 8 broncos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 teams of work mules</td>
<td>$300.</td>
<td>$600.</td>
</tr>
<tr>
<td>- 4 animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 sets of work harnesses</td>
<td>$50.</td>
<td>$100.</td>
</tr>
<tr>
<td>2 wagons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 heavy</td>
<td>$175.</td>
<td>$175.</td>
</tr>
<tr>
<td>- 1 light</td>
<td>$125.</td>
<td>$125.</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td></td>
<td>$2,800.</td>
</tr>
<tr>
<td><strong>HORSE FEED, ETC. (Year one)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43,000 pounds of oats</td>
<td>$0.02</td>
<td>$860.</td>
</tr>
<tr>
<td>15 tons of cotton seed cake</td>
<td>$31.</td>
<td>$465.</td>
</tr>
<tr>
<td>25,000 pounds of salt</td>
<td>$0.02</td>
<td>$500.</td>
</tr>
<tr>
<td>horseshoes, rope, etc.</td>
<td>---</td>
<td>$125.</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td></td>
<td>$1,950.</td>
</tr>
</tbody>
</table>
TABLE 5: MESCALERO APACHE TRIBE LIVESTOCK CAPITAL INVESTMENT REQUIREMENTS (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT PRICE</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>LABOR, ETC. (Year one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 manager</td>
<td>---</td>
<td>$3,000.</td>
</tr>
<tr>
<td>3 line riders</td>
<td>$65./mo.</td>
<td>$2,340.</td>
</tr>
<tr>
<td>9 men for round-ups, 30 days ea.</td>
<td>$1.50/day</td>
<td>$405.</td>
</tr>
<tr>
<td>1 cook for round-ups, 30 days</td>
<td>$2.00/day</td>
<td>$60.</td>
</tr>
<tr>
<td>board for 14 men for 30 days at round-ups</td>
<td>---</td>
<td>$210.</td>
</tr>
<tr>
<td>subtotal</td>
<td></td>
<td>$6,015.</td>
</tr>
</tbody>
</table>

Total estimated expenditures (first year) = $73,765.
Sinking fund, for misc. expenditures = $1,135.
TOTAL = $74,900.

Source: Jefferis, 1913
Finally, the manager and linemen were year-round employees, while additional men and a cook were to be hired for seasonal round-ups. The livestock industry, like any agricultural enterprise, is subject to both busy and slack times (Jefferis 1913).

Along with the initial purchase of cattle and equipment, Jefferis emphasized communal cattle ownership. He recommended that business be handled as a share-holding company, one share of stock (or equal number of shares) to be distributed to each Apache living on the reservation at the beginning of the business. The shareholders would reorganize every year in order to allow children to acquire shares. Individuals could also invest funds into the business and receive profits according to the amount invested.

Jefferis' letter goes on to describe the necessity of each item in his proposed budget. He suggested where cattle and equipment can be obtained, and argues the need for feed supplements. One suggestion was that cows already grazed on the reservation by a leaser, Mr. Lisle B. Tannehill, be purchased for the reservation herd. Jefferis' argument is that cattle already grazed on the reservation would stand a better chance of survival and eventual profit for the Eastern Apache. Why Jefferis singles out Tannehill's cows, as opposed to another lease operator, is not known.

Once the cattle, equipment, and labor force were on the reservation the business would have to be managed with
respect to the reservation pastures, yearly cycle of calving, branding, grazing, round-up, and sale. Here Jefferis makes a substantial contribution to the description of the reservation lands by describing and mapping all grazing areas on the reservation (Figure 12). Jefferis describes the reservation's range lands as outlined on his map. His description includes grazing patterns and existing permittee use of the pastures, relative ground relief, available water, fencing, and general condition of the range land.

Pastures No. 1 and No. 2 are described as adequate to support Indian cattle, particularly as winter range. The pastures were, at the time, leased out to permittees who grazed 7,000 sheep in Pasture No. 1 and 2,500 cattle in Pasture No. 2 (Tannehill’s cattle). The range relief in both pastures are low, and the water supply is adequate, but Jefferis recommends wells, troughs, and spring boxes be improved in the next two years. Fence improvements are also recommended.

Pasture No. 3 was on relatively much higher ground, providing more than sufficient grass for summer grazing. In addition to ample grass cover, the pasture was well-watered. The U. S. Marine Hospital Service at Fort Stanton was the permittee, grazing 1,000 head of cattle on the pasture year-round. Jefferis points out that the pasture is more than adequate for steers, although not sufficient for breeding purposes. Pasture No. 4 is described as similar to Pasture No. 3 but much more
rugged. The pasture is leased to a permittee who had 500 hogs in Nogal Canyon.

Finally, Jefferis describes the Rinconada country, southwest of Sierra Blanca. The Rinconada country is a relatively low, warm, well-protected area and, as such, provides excellent winter pastures for 7,000 head of Mescalaero sheep. Before the country could be used to winter a cattle herd, the Indians had to find an alternative for a winter sheep pasture. Jefferis' only suggestion is that the sheep herd be wintered in the Three Rivers area, a portion of the reservation in the Tularosa Basin on the west side of Sierra Blanca (Jefferis 1913).

Two problems exist with this suggestion. First, the Three Rivers pasture was smaller than the Rinconada pasture. The Apache would be required to reduce their sheep herd in order to provide enough range for the winter months. Second, the Three Rivers country was not directly accessible from Tularosa Canyon. In order to reach Three Rivers, a traveler had to leave the reservation, travel down Tularosa Canyon to the Tularosa Basin, and then proceed north to the western base of Sierra Blanca, following Three Rivers east across the reservation boundary. The inaccessibility of Three Rivers discouraged its use by the Indians in the early cattle operations.

Jefferis' letter raises several questions. If the reservation was grazed by Indian and permittee sheep, cattle, and hogs, why did Jefferis emphasize the need for a cattle operation? What caused Jefferis to insist on cattle
rather than sheep as the preferable livestock on the reservation? Was the reservation's range able to support a cattle operation? A later letter by Jefferis provides some insight into his decision-making.

The permitee system began to break down. Jefferis' letter documents a case in which the permitee in Pasture No. 1 had allowed over-grazing and subsequent range deterioration to occur. This Jefferis blamed on the permitee system that allowed the sheep to graze only on a limited portion of the pasture. The sheep herds were restricted to that portion of the pasture in order to avoid the loss of wool that could occur if the sheep were allowed to graze in brushier areas of the pasture. In addition, water supplies for sheep were scarce (Jefferis 1913).

Cattle permittees also appear to have some difficulty in fulfilling the obligations of their permits. Mr. Tannehill's cattle numbered 500 head more than his permit authorized, consequently Tannehill was fined for each cow over the permit limit. The excessive number of cattle are blamed for a deterioration in pasture quality.

In response to the question concerning adequate pastures on the reservation, Jefferis' later letter again provides some insight. Jefferis states that the previous Livestock Superintendent at Mescalero, later appointed Chief Grazing Inspector in the Forest Service, had assured him that the reservation had the capacity to graze 20,000 head of cattle and horses during the summer and 12,000 head of the same during the winter (Jefferis 1913). The former
Livestock Superintendent advised Jefferis that "cattle would drift toward the summit of the mountains in summer and down in winter, and that the lower country was rested for winter use by the natural range movement of the stock" (Jefferis 1913:5).

The problem with the then current method of grazing was not in the numbers on the range, but by the method that was used under the permit system. The permit system allowed the permittee to graze his pasture on a year-round basis, regardless of the season or the relative elevation of the pasture. Adequate range was apparently available on the reservation, if the use of all pastures was expanded to a yearly grazing cycle.

The question relating to Indian sheep versus Indian cattle is more difficult to answer. The Eastern Apache had adopted sheepherding from other Apaches, particularly the Jicarilla, who were assigned to the Mescalero Apache Reservation between 1873 and 1885. The Jicarilla ran very large herds of sheep and derived most of their economy from the sale of mutton and wool.

Jefferis does not elaborate on the subject of cattle versus sheep, yet some reason or set of circumstances must have led him to believe cattle would be more advantageous to the Apache economy than sheep. Economic data for this period in Southwest history are unavailable. The federal government provided funds for the cattle operation, and many of Jefferis recommendations were carried out during
the 1920s (McCord 1946). Sheep were herded on the reservation until the mid-1930's, disappeared for approximately thirty years, and appeared again in the 1970s (Informant D). There is one flock on the reservation today.

**Chiricahua Settlement on the Reservation**

The beginning of the cattle industry on the Mescalero Apache Reservation parallels the decision of the federal government to resettle the Chiricahua band of the Eastern Apaches on the Mescalero Apache Reservation. While it would be incorrect to state that the Chiricahua settlement triggered the initiation of a Apache cattle operation, their move to the Mescalero Apache Reservation brought about changes in land use patterns and contributed to Eastern Apache adoption of extensive agriculture.

The Chiricahua's distinction as a unique branch of Eastern Apache Indians is most evident on the reservation between 1913 and 1934. After 1934, the Chiricahua assimilated with the Mescalero and Lipan bands and lost their unique identity (Opler and Opler 1950; Turčenėske 1978).

The Chiricahua were assigned to Fort Sill, Oklahoma, after their incarceration at Fort Marion, Florida, and Mount Vernon Barracks, Alabama in 1886 through 1887 (Turčenėske 1978). The band was held in Florida and Alabama as prisoners of war, having been associated with Geronimo's insurrection.
After 1887 the band was assigned to Fort Sill under an agreement with the federal government that the fort's land was to be turned over to them if they were successful at farming the allotment. Believing the government to be earnest in the agreement, the Ft. Sill Apaches became experienced cattlemen and owned approximately 10,500 head of high grade Herefords worth over $300,000.

In 1909 the War Department decided to retain Ft. Sill for military purposes. The Apache were offered a choice of remaining in Oklahoma on other land allotments or moving to the Mescalero Apache Reservation. Approximately fifty percent, 200 Chiricahuas, chose to move to New Mexico. They arrived at Mescalero in the spring of 1913 and were placed under the administration of Agent Jefferis.

Jefferis was instructed by the War Department and the Department of Interior to settle the migrants, construct homes and a hospital for them, and encourage their development of intensive and extensive agriculture. Funds from the sale of Ft. Sill cattle would be distributed among the Chiricahua in New Mexico.

Attempts to settle the Chiricahua were thwarted in every direction. Jefferis lacked the necessary funds to construct adequate housing and a hospital for the migrants. His requests were lost in War Department and Department of Interior bureaucracy. The Ft. Sill funds were not made available as promised. Further, New Mexico Senator Albert Fall initiated an unsuccessful campaign to
turn the Mescalero Apache Reservation into a national park during the second decade of the 1900s.

Environmental conditions also worked against a successful settlement. The Chiricahua were given land assignments at Whitetail (Figure 13), an area located approximately twenty miles northeast of Mescalero. The area is a narrow eight-mile-long valley over seven thousand feet in elevation that periodically suffered severe winter cold, heavy snowfalls, late and early frosts, and occasional spring and summer droughts. Between 1913 and 1915, crops raised at Whitetail were affected by drought, early frosts, and finally, wildfire which destroyed the crops in 1914 (Turcheneske 1978).

The government distributed shares totalling $171,172.03 to the Chiricahua from Ft. Sill cattle sales and, at the same time, ended the band's rations. With inadequate housing, lack of tillable land, and no other means of support, band members were forced to live off the funds. Once the funds were gone, the Chiricahua were reduced to a standard of living far below that attained at Ft. Sill.

Jefferis made every attempt to settle the Chiricahua so that they "not back-slide, because of delay in developing conditions they have been waiting for, their demoralization will be very rapid; the whole Mescalero tribe will be affected, and the superintendent will be up against a hard proposition" (Jefferis 1914:1). Unfortunately, his efforts were not supported by federal
agencies, and Jefferis was eventually forced to resign as Mescalero Agent.

Before his resignation, Jefferis encouraged the Board of Indian Commissioners to provide cattle for the Eastern Apache. He appealed to the Board in 1914, "it is obvious to anyone that an Indian cannot make his living from a tract of land... (the reservation) contains one of the finest ranges in the country. Why shouldn’t the Indians’ grass be eaten by Indian cattle and the profits therefrom accrue to the Indians" (Jefferis 1914:2). Jefferies seriously questioned the Apaches’ chances of survival on the reservation if Congress did not provide the Chiricahua with cattle (Jefferis 1914).

Settlement plans and disbursement of funds continued to be delayed until 1922. Some Chiricahua managed to survive at Whitetail until 1922, others had become angry and despondent, and caused social unrest in Mescalero and Tularosa. A few of the migrants had returned to Oklahoma. After 1922, the Chiricahua slowly gained a foothold at Whitetail, only after ten years of environmental hardship and patience with federal bureaucracy (Turcheneske 1978).

The Ft. Sill Chiricahua had adopted a ranching economy prior to Mescalero Apache Reservation settlement. Their move to the Mescalero Apache Reservation created a need to open pastures for their cattle. Chiricahua settlement provided the impetus for Superintendent Jefferis to consider the extent of the reservation leased out to non-Indian ranchers and to ask questions about the
profitability of grazing Indian cattle, rather than Anglo cattle.

The Chiricuhua settlement on the reservation is consistently referred to in correspondence as a positive influence on the reservation. In terms of the process of culture change by the Eastern Apache, the Chiricuhua encouraged extensive cattle operations under Indian ownership. Livestock operations, initiated with federal funds in 1922, appeared to be a feasible way to ensure Apache self-sufficiency.

Use of the Forest Reserve

The Mescalero Apache forest reserve covers more than two-thirds of the entire reservation. Prior to 1855 the reserve was an extensive virgin stand of primarily fir and pine. Indians used the forest for food gathering and isolated encampments in favored valley and meadow locations. No reports exist of intentionally set fires for forest management practices by the Eastern Apache. The extensive reserve became increasingly important to Anglo settlers and Mescalero Apache agents as American pressures built-up in the region.

The existence of the Mescalero Apache forest reserve was known by Anglo settlers. Within the boundaries of the reservation were private landholdings that pre-dated the reservation, primarily along Rio Tularosa. One of the landowners was Joseph Blazer, a former dentist and military man. After 1865, Blazer freighted supplies to the military
between Mexico and Fort Sumner. In 1869, Blazer purchased a one-third interest in a sawmill at Mescalero.

Acting as a middle-man, Blazer hired independent Anglo contractors to cut timber on his claim and on the reservation. He milled and sold lumber in a high-demand market and earned sizable revenues. Because Blazer's land claim pre-dated the reservation, he did not pay stumpage fees on the timber, only for the cost of logging. The federal government later charged Blazer a "stumpage fee," the price of standing timber, but whether the fee was credited to the Indians or to the Department of Interior is unknown (Historical Research Associates 1981:24).

During the 1880s, Blazer sold lumber to the Mescalero Agency and to surrounding settlers. The primary source of the lumber was the Mescalero Apache timber reserve, usually harvested without the benefit of Indian approval or stumpage payment. There was no legal protection of Indian timber reserves until 1888 when the federal government restricted trespass and prohibited the harvesting of timber on all reservations (Historical Research Associates 1981). Thus, Blazer, and other mill operators who acquired timber off of Indian reservations, were forced to seek alternative sources, charge higher fees for lumber, or go out of business.

Timber harvest and forest management became the responsibility of the reservation agent under the federal restrictions. On the Mescalero Apache Reservation timber harvesting became the primarily means by which agents
enforced Indian construction and occupation of houses. Timber was cut and milled for Indian and agency needs without payment to the Mescalero Apache (Historical Research Associates 1981).

Forest management was severely limited by the lack of federal funds and qualified staff. During the last years of the nineteenth century the agents sought federal assistance for brush disposal and fire prevention work in order to protect the forest reserve and for administrative costs. These pleas, however, were not addressed until the turn of the century when the Forestry Section of the Indian Service was formed (Historical Research Associates 1981). The first Indian Service forester was J. P. Kinney.

Kinney, a well-trained and highly motivated graduate of Yale University's School of Forestry, recognized the need to manage Indian forest reserves in order to protect and retain the timber resource as part of the trust responsibility. Unfortunately, he struggled with federal bureaucracy and a chronic lack of funds. Both elements hindered effective management of the reserves (Kinney 1921).

The reservation's forest reserves continued to attract the attention of the reservation agents and the Indian Service during the first two decades of the twentieth century, but a lack of direction and financial support by the federal government hindered forest management and timber production. Construction on the reservation fell off due to the lack of funds. The demand for lumber
continued in the Southwest and elsewhere due to World War I, but federal regulations and the lack of Mescalero Apache interest in the lumber industry limited the use of the forest reserve.

Between 1920 and 1930 three timber contracts were sold on the reservation (Figure 14). The Elk & Silver Creek sale was purchased by a timber operator who believed the southern portion of the reservation would not be difficult to log nor transportation costs to mills south and east of the reservation excessive. The Indian Service Forester, J. P. Kinney, approved the sale in 1919 and logging began in 1920 with extensions 1936. The sale was interrupted once in 1925 due to low market returns (Historical Research Associates 1981).

In 1920 the Indian Service offered the Nogal-Tularosa area in the southwest corner of the reservation for sale. The sale was purchased by a timber contractor whose minimal transportation costs to a mill in Alomogordo kept the cost of lumber low. The mill location provided cheap and easy access to rail heads and lumber markets in southern New Mexico. Harvesting continued on the sale until 1926 when the purchaser exhausted its funds and the market for lumber reached a low.

The Turkey Creek Sale, located on the northern boundary of the reservation, was purchased by a sawmill owner in Ruidoso. Again, proximity to the mill, an existing road system, and a lumber market persuaded the Indian Service to open the forest reserve for sale. The purchaser
ended his operations in 1929 due to a limited cash flow (Historical Research Associates 1981).

Changes in the forest reserve were limited to these three sales due to market conditions. However, the existence and potential use forest reserve attracted the attention not only of lumber producers, but from Southwest residents who were accustomed to using the reserve for outdoor recreation purposes.

Two attempts to control logging and maintain a pristine reserve by residents occurred during the early 1900s. One attempt to transfer a major portion of the reserve to the more closely regulated Alamo National Forest was stopped due to the administrative problems associated with Indian Service and Forest Service jurisdiction. A second attempt to transform the reservation into a national park was hindered by national politics and by the Teapot Dome scandal that involved the major proponent of the park issue, Albert Fall. The forest reserve remained in the reservation boundaries and under the control of the Indian Service throughout the Allotment Act period (Historical Research Associates 1981).

Livestock Operations in 1930

Slowed markets and lack of federal support also affected the livestock operations, and the livestock operations on the reservation slowly eroded over time. By 1930, the operations were characterized by mismanagement, lack of commitment, and a lack of organization and
cooperation among livestock owners. The dwindling interest in productive livestock operations is described in a report dated December 31, 1929, addressed to the Commissioner of Indian Affairs by Superintendent P. W. Danielson (Danielson 1930).

The report, by reservation Forest Supervisor Willoughby H. Walling (1929) documented the declining livestock productivity. Walling recommended grazing allotments be made to individual Indians to improve productivity. At the conclusion of the report is a proposed working plan for the Apache livestock enterprise.

Walling’s report provides a detailed look at grazing land use and Eastern Apache attitudes towards livestock operations on the reservation in the late 1920s and early 1930s. According to Walling, there were 19,000 head of sheep, 1,000 head of cattle, and 10,000 goats all owned by Eastern Apache. No grazing permits to non-Indians were issued (Walling 1929).

The sheep herds were primarily owned by 100 individual Indians. The largest herds had 500 sheep, while smaller bands of as few as 30 sheep were grazed together in herds numbering 500. The cattle were run as a tribal herd, owned primarily by older Chiricahua Indians. Twenty Indians owned goat flocks varying in number from 200 to 1,200.

All livestock was grazed on open range, utilizing approximately 75 percent of the total reservation. The remaining 25 percent was not used for grazing purposes due to lack of water development. Cattle and sheep grazed on
all parts of the reservation throughout the year due to a lack of fencing and corrals.

This method of grazing produced low yields for a number of reasons. Livestock caught at higher elevations during the winter months suffered due to lack of forage. Since livestock were on all available range land throughout the year, the quality of forage was low and pastures tended to be over-grazed. Also, bulls ran with cows year-round and allowed for year-round calving. Calves born in the fall and winter have little chance of survival and evidence suggests cow mortality was high because of unseasonable calving.

Sheep were run in large multi-owned flocks. The Eastern Apache sheepowners generally hired Mexican sheepherders and left the business of shepherding to the Mexicans. There Mexicans normally established a camp and herded sheep back to a corral every evening. The camps were not moved until all the feed in one day’s drive had been consumed by the flock (Moles, Kogler y Neale 1925). The Mexicans were paid between $30 and $50 per month plus supplies and food.

Indian interest in sheep production varied. Some Indians were reportedly committed to good sheep management, while others cared very little for their herds. This disinterest on the part of some Indians is represented by a low lamb crop of less than 40 percent survivability in the spring of 1931.
The goat industry suffered a serious setback in 1930 when Malta Fever, an undulant fever, was discovered on the reservation. A drop in the price of mohair also contributed to low profits for goat owners (Moles, Kogler, y Neale 1925).

Declining productivity and apparent disinterest in livestock grazing by the Apache caused the BIA officials to propose a management plan that would increase productivity and generate revenues. The plan recommended the sale of grazing permits to non-Indian ranchers in the immediate area. Indian rights to graze livestock would continue at a lower cost and without need for a permit. The plan, however, was not successfully implemented.

The BIA continued to administer leasing permits to non-Apaches and to encourage the Indians to graze cattle. Most of the Indian cattle were butchered for immediate consumption. Herd size and Indian interest in livestock production decreased at a similar rate.

Reservation Settlement and Agricultural Patterns, 1880-1930

Reservation assignment and the Allotment Act forced the Eastern Apache to adapt the reservation and federally imposed settlement patterns to traditional spatial organization. Traditionally, the Eastern Apache were matrilocal and continually moving within Apacheria in search of subsistence. During the late nineteenth century these settlement preferences continued on the reservation, although movement was restricted within reservation
boundaries. The occupation of American-style housing became a target for agents attempting to promote agricultural, sedentary land uses according to the allotment policy.

Permanent residence was considered to be essential in encouraging the acceptance of intensive agriculture. If the Apache continued to establish short-term residences, their opportunity to plant, grow, and harvest crops would be decreased and the Allotment Act could not be enforced. Thus, agents made every effort to initiate log home construction, crop production, and band residence within the reservation boundaries.

Varying topography and scarcity of water limited land available for intensive agriculture. Location of settlement, house construction, and agriculture was possible only in a few canyons with constant water supplies. Occupation of canyons as permanent residence areas began after 1883 (Figure 15).

In 1881 Agent Llewellyn reported that Indian camps were scattered "settlements" in various canyons where water was available (Llewellyn 1881:135). Llewellyn documented the location of bands and the amount of land brought under cultivation. Tularosa Canyon was settled by a Mescalero band led by Nautzila. Nautzila's band had 100 acres under cultivation. Another Mescalero band, led by Nautogalinje, settled in the Three Rivers canyon and cultivated 250 acres of corn, melons, potatoes, and vegetables with an additional 400 acres fenced.
A year later Llewellyn reported the construction of two log houses and 500 to 600 house logs cut. Despite the potential construction, the Indians preferred teepees or wickiups (Llewellyn 1882:124). The agency doctor’s report for 1885 indicated that teepees remained the preferred house type. Overall, the bands were described as "restless and wily people" (Llewellyn 1885:150).

A few log houses were constructed between 1886 and 1888. The bands were reported to be breaking up into family groups and occupying canyons (Cowart 1888). The canyons inhabited included Three Rivers, Nogal, Carrizo, and Elk-Silver.

By 1889 changes were beginning to occur in Indian land use. Agent Bennett described the Eastern Apache to be "cultivating little farms" on a total area of 200 acres and growing corn, oats, potatoes, and vegetables. Three hundred head of cattle were owned by the Mescalero and Lipan. Fourteen log homes had been constructed by the end of the year (Bennett 1889:251).

Bennett’s 1890 report emphasized the addition of 60 acres to the tilled land base and he estimated that 4,000 to 5,000 acres could be tilled. Cattle counts ran close to 400 and the horse population was estimated at 700. Bennett indicated that the Indians wanted to construct more homes for winter occupation, still preferring to live in teepees during the summer (Bennett 1890).

Annual reports in 1895, 1896, and 1897 indicate increases in house construction, from thirty-two to
forty-five, but a persistent preference for teepees during the summer (Stottler 1895, 1896, 1897b). The houses were of log construction with frame roofs, floors, and windows. Only one house was reported to be occupied in 1895 (Stottler 1895).

As the reservation entered the twentieth century, occupation of the entire reservation continued to be limited by the scarcity of water. Accessibility to remote areas was not possible because of minimal road construction, and destruction of the horse herds in 1897. Those canyons settled by family groups prior to 1900 remained the primary location of settlement on the reservation. Matrilocal residence continued to dominate settlement patterns (Basehart 1974).

The settlement of the Chiricahua band at Whitetail is the only noticeable change in reservation occupation after 1900. As previously discussed, the Chiricahua were assigned land in Whitetail Canyon. The Chiricahua, who were accustomed to house residence and intensive agriculture in their previous Ft. Sill location, were accommodated with log cabins in 1918 (Turcheneske 1978).

The most popular settlement area in 1920 (Table 6; Figure 16) was Whitetail (43 percent of total residences) where the Chiricahua had been settled in 1915 and Mescalero (27 percent of total residences). Preference for Mescalero and Highway 70 residence location was due to the relatively easy access to water and access to agency buildings at Mescalero. The agency buildings quickly became the central
TABLE 6: RESIDENCES PER SETTLEMENT AREA, 1920
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>AREA</th>
<th>NO. OF RESIDENCES</th>
<th>PERCENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Carrizo</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Nogal</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Highway 70</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Mescalero</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Whitetail</td>
<td>20</td>
<td>34</td>
</tr>
<tr>
<td>Elk-Silver</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
place on the reservation. Access to rations, medical services, educational services, and directives from the federal government were possible. Tularosa Canyon also provided access to communities surrounding the reservation including Tularosa to the south and Ruidoso and Fort Stanton to the north.

Population on the reservation fluctuated during the Allotment Act period (Table 7). Early population figures relate to Mescalero and Lipan bands. The entire population decreased between 1900 and 1910 due to a smallpox epidemic. The 1920 figures include the Chiricahua band. By 1930 the reservation population was over 700 Mescalero, Lipan, and Chiricahua residents.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890</td>
<td>513 (Mescalero and Lipan)</td>
</tr>
<tr>
<td>1900</td>
<td>487</td>
</tr>
<tr>
<td>1910</td>
<td>444 (loss due to smallpox epidemic)</td>
</tr>
<tr>
<td>1920</td>
<td>583 (Mescalero, Lipan and Chiricahua)</td>
</tr>
<tr>
<td>1930</td>
<td>708 (Mescalero, Lipan and Chiricahua)</td>
</tr>
</tbody>
</table>

Sources: U.S. Census 1890, 1900, 1910, 1920, 1930.
Indian Reorganization Act of 1934

While the Eastern Apache were not subjected to land allotment and loss of reservation land, the social conditions and spatial organization of other Native Americans deteriorated under the Allotment Act. By 1925 Native Americans had lost 120 million acres of treated land and were living on the edge of starvation.

Difficulties among the Pueblo and Navajo Indians of New Mexico, visible to the liberal artist communities of Santa Fe and Taos, were reported in the press. With the support of the liberal public, John Collier, a critic of the government's allotment program, challenged the effectiveness of the Indian Service and its ability to administer the trust relationship on behalf of the Indians. In 1933 Collier was appointed Commissioner of Indian Affairs and charged with improving the conditions of Indian populations (Anonymous 1941).

The reform of Indian policy and administration of the trust responsibility took a dramatic turn under Collier's leadership. Middle-class Americans were not the only ones to receive a new deal; the Indians got a new deal in the passage of the Indian Reorganization Act (also known as the Howard-Wheeler Act), passed by Congress in 1934.

This law reversed the emphasis of the Allotment Act. The Indian Reorganization Act (IRA) introduced cultural pluralism, tribalism, and the explicit acceptance of Native
American culture in the United States. In one legislative process the trust responsibility was redefined.

The focus of the IRA was on tribal organization and development of reservation resources in order to improve living standards on the reservation. Each reservation population was asked by the BIA to elect a council. This so-called tribal council was to represent the tribe in all matters of trust administration.

The concept of tribalism was not clearly defined in the 1934 legislation, nor is it well-defined today. The term "tribe" has received much discussion by anthropologists, particularly Steward (1955) and Sahlins and Service (1960), who used the term as an intermediary stage in cultural evolution between band and state level societies. Fried (1967:156) fails to recognize "tribe" as a necessary stage in cultural evolution and views the political identity of "tribe" as "a mythic structure, a contemporary socio-cultural response to contemporary situational stimuli."

The federal government uses the term "tribe" to designate a formal, political organization of one or more Native American groups (Taylor, T. 1972). Bands such as the Mescalero, Lipan, and Chiricahua united under one tribal council and name to be recognized by the federal government. Tribalization was a requirement of the IRA. Any Indian culture group wishing to be recognized by the government, and therefore eligible for federal funds and assistance, had to elect or appoint a tribal council.
The Eastern Apaches quickly voted to accept the terms of the IRA, elected a tribal council, and wrote a constitution (Appendix A) and charter (Appendix B). "Mescalero" functioned as the tribal name of the Eastern Apaches. Thus, only after 1934 when the federal government formally recognized the tribe, can the bands on the reservation be properly called the Mescalero Apache Tribe.

Resource development was encouraged by Commissioner John Collier, when he established a revolving bank system that allowed tribes to borrow money from the federal government in order to achieve better living conditions. The funds were to be used for identification of raw materials on reservations, for the construction of processing plants, and for the sale of products in competitive markets.

Collier believed that Indians lacked only the capital to develop resources that could benefit the tribes and raise the standard of living on reservations. By improving conditions on the reservations, Indian culture and traditions would be retained in American society. He assumed that Indians wanted to work in diverse economies and would do so to protect their ethnicity.

Hoping to improve the government's ability to communicate with tribes, and in the interest of science, Collier hired anthropologists, sociologists, and historians to identify and describe Indian culture on the reservations. Collier demonstrated a concept of place and
region over federal administrative concerns for the efficient management of space (deBuys 1987).

Other scientists were also directed to aid tribes with resource development. Foresters, soil scientists, agriculturalists, economists, and geologists from other federal agencies worked to inventory reservation resources. The newly created Soil Conservation Service was enlisted to inventory agricultural conditions on reservations in the Southwest, including the Mescalero Apache Reservation. Foresters from the U.S. Forest Service also participated in resource inventories and recommendations for resource development in the Sacramento Mountains.

Mescalero Apache Agriculture in 1936

In 1936 the Soil Conservation Service (SCS) inventoried land uses on the Mescalero Apache Reservation. The SCS project included field and aerial data collection. The map series was published in 1936 and a management report was published in 1939.

The map and report identify reservation land use by district (Figure 17). Of the reservation's 470,240 acres, the SCS inventoried a total of 9,447.11 acres, or 1.96 percent, of land in agricultural use (Table 8). The largest area available for agricultural purposes is located in the Elk-Silver drainage. The drainage occupies a long, narrow canyon where the length of daily sunlight and thermal conditions are restricted by topographic features.
Figure 17

AGRICULTURAL DISTRICTS
SOIL CONSERVATION DISTRICTS, 1936
MESCALERO APACHE RESERVATION
TABLE 8: TOTAL AREA OF AGRICULTURAL LAND, 1936  
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>AREA</th>
<th>ACRES</th>
<th>PERCENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>106.67</td>
<td>.02</td>
</tr>
<tr>
<td>Carrizo</td>
<td>1851.02</td>
<td>.4</td>
</tr>
<tr>
<td>Tularosa</td>
<td>1875.91</td>
<td>.4</td>
</tr>
<tr>
<td>Nogal</td>
<td>202.67</td>
<td>.04</td>
</tr>
<tr>
<td>Whitetail</td>
<td>1913.60</td>
<td>.4</td>
</tr>
<tr>
<td>Elk Silver</td>
<td>3497.24</td>
<td>.7</td>
</tr>
<tr>
<td>Total</td>
<td>9447.11</td>
<td>1.96</td>
</tr>
</tbody>
</table>

* Percent of total Reservation area (470,240 acres).

Source: U.S.D.A., Soil Conservation Service 1936
Carrizo, Tularosa, and Whitetail have approximately half the area of Elk-Silver. These areas are higher in elevation than Elk-Silver, and year-round cool temperatures restrict agricultural production.

The report also identifies amounts of agricultural land use by type per district (Tables 9 and 10). The agricultural land use on the reservation is divided into four categories: idle, pasture, cultivated, and forest. (The forest lands are uncleared within larger agricultural land areas.) Whitetail has the largest percentage of forested land. The highest percentage of available land in cultivation is found at Three Rivers, followed by Nogal and Whitetail. Seventy-five percent of the Elk-Silver District is used for pasture. All districts except Elk-Silver have a high percentage of idle land, ranging from nineteen percent in Whitetail to thirty-four percent in the Tularosa district. Crops cultivated include corn, oats, barley, and potatoes, all cold weather crops (USDA 1936).

Agricultural land on the Mescalero Apache Reservation is limited. Although the 9,447.11 acres identified by the SCS is much larger than figures presented in earlier Department of Interior reports, the 1936 figure demonstrates the lack of agricultural land on the reservation.

The Mescalero Apache Cattle Industry

The livestock industry did not experience much change during the late 1930s and early 1940s. Individual cattle
<table>
<thead>
<tr>
<th>AREA</th>
<th>IDLE</th>
<th>PASTURE</th>
<th>CULTIVATED LAND</th>
<th>FOREST</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>27.02</td>
<td>27.73</td>
<td>51.20</td>
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<td>105.95</td>
</tr>
<tr>
<td>Carrizo</td>
<td>323.55</td>
<td>908.08</td>
<td>279.47</td>
<td>34.13</td>
<td>1545.23</td>
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<tr>
<td>Tularosa</td>
<td>505.60</td>
<td>509.16</td>
<td>453.69</td>
<td>0</td>
<td>1468.45</td>
</tr>
<tr>
<td>Nogal</td>
<td>40.53</td>
<td>45.51</td>
<td>61.87</td>
<td>0</td>
<td>147.91</td>
</tr>
<tr>
<td>Whitetail</td>
<td>347.73</td>
<td>755.20</td>
<td>696.89</td>
<td>51.2</td>
<td>1651.02</td>
</tr>
<tr>
<td>Elk Silver</td>
<td>238.22</td>
<td>2631.11</td>
<td>563.20</td>
<td>55.47</td>
<td>3488.00</td>
</tr>
</tbody>
</table>

Source: U.S.D.A., Soil Conservation Service, 1936
<table>
<thead>
<tr>
<th>AREA</th>
<th>IDLE</th>
<th>PASTURE</th>
<th>CULTIVATED LAND</th>
<th>FOREST</th>
</tr>
</thead>
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<td>Three Rivers</td>
<td>25</td>
<td>26</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>Carrizo</td>
<td>21</td>
<td>59</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Tularosa</td>
<td>34</td>
<td>35</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Nogal</td>
<td>27</td>
<td>31</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Whitetail</td>
<td>19</td>
<td>41</td>
<td>38</td>
<td>3</td>
</tr>
<tr>
<td>Elk Silver</td>
<td>7</td>
<td>75</td>
<td>16</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: U.S.D.A., Soil Conservation Service, 1936
owners continued to graze cattle across the reservation throughout the year. Livestock revenues continued to be minimum under this management style.

In 1945, Mescalero cattlemen united their individual cattle operations into one reservation-wide management group known as the Mescalero Indian Cattle Growers' Association (Mescalero Indian Cattle Growers' Association 1945). The Association formalized their operating procedures in a set of Articles and By-Laws (Appendix C) later approved by the tribe and the Commissioner of Indian Affairs in 1946. The preamble of the Articles of Association states:

"We the undersigned members, all of whom are residents of the Mescalero Indian Reservation and of the State of New Mexico and engaged in the production of livestock and livestock products do hereby voluntarily associate together, without capital stock, for the purpose of forming a non-profit cooperative livestock association" (Mescalero Indians Cattle Growers’ Association 1945:1).

The Articles of Association continue with a statement establishing the purpose of the Association as range management and conservation. Also included in the Articles is a statement that confirms the subjugation of the Association to the tribal laws ratified under the Indian Reorganization Act.

Sections of the By-Laws establish the operating procedure of the Association. Membership was open to anyone who was both a member of the Mescalero Apache Tribe
and a resident of the Mescalero Indian Reservation. Membership renewal was contingent upon an active cattle operation, and once a member ceased to graze cattle he was automatically withdrawn from the Association. Violation of any of the By-Laws was also grounds for expulsion from the Association.

Association business was conducted at annual meetings held on the first Friday in February of each year. Special meetings of members could be called at any time. Members elected directors for a two-year period by secret ballot at the annual meetings. Compensation for directors and officers of the Association was set at a rate equal to the rate of officiating tribal board members' reimbursement for business duties.

The Board of Directors had general supervision and control of the business and affairs of the Association according to Section IV of the By-Laws. Their primary task was to prepare an annual budget and plan of operation for the coming year. The plan of operation was carried out by a cattleman hired by the Board of Directors.

Finally, the By-Laws established the accumulation and dispersal of Association funds. Two funds were established. One fund was a reserve, the other was a fund of net savings. The reserve fund was to be no less than fifteen percent of the total assessments made each year until the fund equaled $15,000. Net savings, accumulated through assessments or transactions of the Association, were to be used to reduce assessments or add to the reserve.
fund and were to be distributed among members of the Association in good standing, or be used for any public purpose on the reservation (Mescalero Indian Cattle Growers' Association 1945).

Cattle operations between 1946 and 1952 were less than an entrepreneurial success. While range resources were adequate to produce a successful operation, capital, labor, and management were insufficient to produce revenue sums equal to the potential. Evidence of a breakdown in the cattle operation appears in the method of seasonal operations.

Following spring branding, an attempt was made to move cattle from the lower, east side of the reservation to higher, west side pastures. However, inadequate fencing, corrals, and water sources made the spring round-up difficult. Cattle were often missed in the initial round-up and inexperienced cowboys spent most of the summer gathering, branding, and moving cattle to the higher pastures in the Rinconada and Three Rivers areas. Pasture productivity was reduced because large numbers of cattle often spent the entire summer on winter range.

In the fall, cattle were moved to holding pastures at Cow Camp in preparation for two auctions. Cattle were moved over long distances without adequate feed or water because the corrals at Cow Camp were the only adequate gathering sites on the reservation.

The tribe also tried unsuccessfully to raise a commercial bull herd. The bulls did not bring a high
market value, and they were inadequate for breeding with Association cows. The bulls were wintered on a pasture heavily used in the summer by cows, and redistributed on the summer pastures around every May 15th. Replacement heifers were normally summered near Sierra Blanca and wintered one season in the Rinconada. The heifers were picked up and distributed for range breeding as two-year-olds.

Despite the attempts to use systematically pasture resources and available facilities, the cattle operation lacked the foresight and knowledge of tested management. The cattle operation broke down during the course of a year and potential profits were lost. In addition to poor management, abuse of an unwritten law contributed to decreasing marginal returns. An informal agreement allowed any member in good standing to butcher one animal per year for family use. The custom was not closely controlled and over 200 cattle were often butchered annually without payment to the Association (Informant D).

Forestry During the IRA

The philosophy of the Indian Reorganization Act was easily applied to forest management practices on the Mescalero Apache Reservation. Given the extent of timbered lands, tribal ownership of the forest, and a tribal management style that reinforced resource management by the group rather than the individual, the tribe quickly adapted the change in federal policy to meet their needs.
The Indian Reorganization Act reinforced culturally accepted methods of resource management and encouraged the development of forest resources. The Act specifically stated: "The Secretary of the Interior is directed to make rules and regulations for the operation and management of Indian forestry units on the principle of sustained-yield management. . . ." (U.S. Congress. Senate 1934).

Not only did the IRA give management responsibilities to the tribe, the Mescalero Apache were singled out by John Collier to receive additional federal service and support to develop forest resources. These funds, available in the form of low interest loans, were used to increase and improve the reservation’s road system, evaluate the forest’s capability to produce timber, and initiate forest management.

Forest management also received funding and support from Civilian Conservation Corps (CCC) programs on the reservation. When President Roosevelt allocated funds for the CCC work projects, an additional $5,000,000 was added to create CCC camps on Indian reservations to employ Indian enrollees and accomplish conservation work on the reservations. Indian CCC programs improved land areas not accessible to all Americans, but improved land that was used by private Indian populations (Historical Research Associates 1981:120).

Enrollees on the Mescalero Apache Reservation included Mescalero Apache and Indians from other reservations. Portable camps were constructed at Carrizo and Head
FOREST LAND USES
1930 - 1950
MESCALERO APACHE RESERVATION

Source: Historical Research Assoc. 1981

Figure 18
Springs. Mescalero Apache enrollees commuted to the camps when possible. Enrollees worked on forest-related projects from July 1933 to August 1934.

Forest improvements included a road network, a reservation-wide telephone system, two fire lookouts, and brush removal. These improvements increased fire protection and accessibility in the forest. CCC funding continued until 1942 when the program was disbanded nation-wide. During the ten-year period $900,000 was spent on the Mescalero Apache Reservation, the majority going to forest and range land improvements (Historical Research Associates 1981:123).

Tribal forest and salvage sales dramatically increased after 1934 (Figure 18). The single most limiting factor in timber harvesting was road access to timber stands and transport of logs to a mill site. Access was limited by the infrequent road system in the reserve. Mill sites were located at some distance to the reservation. Consequently, much of the harvested timber was milled on-site by portable mills. Cut lumber was easier to transport to railheads and markets in Alamogordo, Cloudcroft, and Ruidoso.

The need for market accessibility and a reservation road system were determining factors in locating timber sales within the pine reserve. The entire southwest corner of the reservation, accessible to Alamogordo via Nogal Canyon, was sold as one contract. The Lower Elk sale was reached via Cloudcroft. The other sales, including Whitetail, Pine Canyon, and Old Nogal-Tularosa, were
offered as road improvements occurred (Historical Research Associates 1981).

Salvage sales were offered to Indian and non-Indian contractors after World War II. Salvage sales were offered for forest reserve improvement, fire prevention, and right-of-way purposes. Windthrow and mistletoe salvage was necessary at Carrizo, Snow, and Bear Canyons, and in the Whitetail area. Right-of-way needs were met for the construction of Harley Fire Tower, Elk Silver Road, and Nahzille Dam.

While the first sales were to non-Indian lumber companies, Mescalero Apache loggers were equally able to buy, cut, haul, and sell logs. These factors combined to increase timber sales administered by the BIA and to generate revenue for the tribe. The tribe was committed to a pay-back schedule on a $268,100 loan it had taken out from the IRA revolving fund against the timber reserves. Direction offered in BIA forest management plans provided guidance for the BIA Forest Branch and aided the tribe in making management decisions with timber purchasers.

Mescalero Apache logging began in 1936 with an agreement between the BIA, the tribe, and an Alamogordo sawmill. The agreement stipulated that logs cut by Indians would be milled at the Alamogordo site. The mill paid the BIA for the logs. All logging costs, including labor, were paid by the BIA. The BIA turned the profits over to the tribe, who used the profits to pay for stumpage and for
credit on lumber from the mill. The lumber was used to construct homes on the reservation.

In 1942, tribal members Bernard and Andrew Little proposed to subcontract logging units from the tribe. BIA officials were encouraged by the fact that Indian subcontractors had established themselves on the market. After a lengthy discussion, a contract was drawn that allowed the Littles to log tribal timber for the BIA. The BIA paid the brothers the difference between the stumpage value and the log value of logs delivered to a mill in Alamogordo. The Little brothers continued to log during World War II until equipment and labor shortages closed down their enterprise (Historical Research Associates 1981:145).

The war years created a fast-paced market for lumber operations all over the Southwest. Most Southwest lumber was sent to construction and supply locations in California. The demand for Mescalero lumber was high, but labor shortages soon became apparent as most able-bodied men on the reservation went to Los Angeles to work in war-time factories. Without the needed labor force, lumbering was slowed, and tribal revenues decreased.

While excessive logging was a strain on the reservation’s resources, the revenues earned by the tribe put the tribal treasury in the black. The tribe’s debt to the federal government was paid off, making the Mescalero one of the few tribes to pay back loans acquired during the IRA (Informant D).
The tribe was anxious to invest revenues in business ventures that could maximize tribal resources, including timber. In 1946, the Tribal Council requested that the BIA study the feasibility of opening a large sawmill on the reservation. The study was delayed and tribal interest waned until the mid-1950s (Historical Research Associates 1981).

Settlement Patterns, 1935-1950

The Indian Reorganization Act created the opportunity for improvements in Mescalero Apache housing. The primary goal of the federal policy—to improve living conditions and economic self-sufficiency on reservations—was evident in immediate changes in housing conditions on the Mescalero Apache Reservation. A review of residence location and housing discloses that the federal emphasis was to promote intensive agriculture, despite the failure of intensive agriculture during the Allotment Act. Farming was encouraged with the construction of family homes and outbuildings in favored band locations.

All consulted sources—cartographic, oral, and on-site—indicated that band residence in previously settled canyons was reinforced with house and outbuilding construction in 1935. The Mescalero bands were provided housing in Three Rivers, Tularosa, Carrizo, and Nogal Canyons (Figure 19). Chiricahua band residence remained at Whitetail, and Lipan residence remained in the Elk-Silver
Canyons. By 1940 a total of 206 residences were located in seven settlement areas on the reservation (Table 11).

Assuming that the percentage of housing units per band indicates the relative size of band membership, the Mescalero bands continued to be the largest. Combined figures for Mescalero, U. S. 70, Nogal, Three Rivers, and Carrizo Canyons constituted seventy percent of all residences. The remaining percentages of standing structures, and therefore population, are divided between the Chiricahua band (11 percent) at Whitetail, and the Lipan (19 percent) at Elk-Silver.

These data indicate that in 1940 the Lipan population was almost twice as large as the Chiricahua, a reversal of 1920 settlement and population characteristics that indicates thirty-four percent of the population resided at Whitetail and only twelve percent at Elk-Silver. Since there is no recorded addition to reservation population from outside areas, it can be assumed that at least half of the original Chiricahua population had moved to primarily Mescalero band locations.

Tularosa Canyon dominates the reservation as the central place for residence. Fifty-five percent of all residences were located here. The accessibility, water, and previous occupation of Tularosa Canyon made it an attractive place to live. The only improved road leading to, and across, the reservation followed Tularosa River.

Water, consistently available in Tularosa Canyon throughout the year, assured the possibility of agriculture
TABLE 11: RESIDENCES PER SETTLEMENT AREA, 1940
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>AREA</th>
<th>NO. OF RESIDENCES</th>
<th>PERCENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Carrizo</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Nogal</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Highway 70</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>Mescalero</td>
<td>88</td>
<td>43</td>
</tr>
<tr>
<td>Whitetail</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>Elk-Silver</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>206</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
during the growing season. In addition, BIA agency offices and a store were located in the town of Mescalero along Tularosa Creek.

Other areas of residence demonstrated tribal reliance on available water sources for agricultural land uses. Whitetail Canyon, with twelve percent of the housing, was the second largest area where tillable land was available. The remaining canyons were narrow with limited amounts of water and hours of sunlight, and agriculture and residence were limited here.

New houses and out-buildings were constructed in 1935 (Infomant D). The pattern of family residence was enforced by BIA supervision of building construction. The buildings reinforced intensive agriculture land use patterns and dispersed settlement over the reservation. A dispersed settlement pattern was the government’s intention (Boyer 1962:598). The government wanted to disperse kin groups to encourage dependence upon agriculture rather than hunting and gathering activities.

All houses and associated farm buildings were identical in floor plan, materials, and arrangement. Each family was provided with a four-room house, a two-story barn, and a chicken coop on a 20-acre land assignment. House, barn, and coop typified the residence of each family (Figure 20). The unit was usually located in the canyon bottom near a water source and within visible distance of another family unit.
Figure 20. 1940 Residence

Figure 21. Vacated 1940 Residential Site

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The houses, built of ship-lap lumber on cement foundations, were not insulated and did not have indoor plumbing. The four rooms were of equal size and the entire structure measured 24 by 25 feet. The roof line was slightly pitched, and an outside chimney extending above a peak. Each room had one window. Entrance was gained on either end of the structure. The house exterior exhibited no decorations or trim except at Whitetail where exterior adornment followed the Greek Revival style (Wilson 1987).

The barns were also small in size with dimensions of 20 by 20 feet. They were two-storied, constructed of lumber, and built in the board and batten style. The first floor was divided into two equally sized sections separated by two small interior rooms and a ladder leading to the second floor. The second floor, also accessible from an outside entrance, had only one room with a pitched ceiling.

All barns except those at Whitetail had a large sliding door on their broad side. Whitetail barns had doors on either end of the barn opened into each first-floor section. Barns in the Whitetail area were also embellished with eve cut-ins and decorated corner columns in the Greek Revival style (Wilson 1987).

Chicken coops were usually located equidistant from the house and barn. Each coop was approximately 10 by 5 feet with three windows and a door along the front of the outbuilding. The coops had sloping roofs and a side-door entrance. Board-and-batten construction typified the
coops. Both the coops and the barns were painted red, while the houses were generally white.

Each family made use of the land surrounding the resident unit. Gardens, plowed fields, pasture lots, and uncleared lands appear on SCS maps (1936). Attempts to adapt land to intensive agriculture and self-sufficient farming typified the settlement patterns enforced by the BIA during the IRA.

Field inspection of units along modern roads in all areas of residence indicate similar patterns of land adaptation during the 1930s and 1940s. The location of family units are evident today by standing structures and house foundations. In addition, the location of small apple orchards indicate 1935 residence location (Figure 21).

Access to the outlying residence areas remained unimproved while Mescalero Apache continued to be the only service area on the reservation. While the houses improved living standards, the population, particularly the women, did not care to be isolated from kin (Informant D). Men returning from World War II brought back an interest in the world beyond the reservation.

All of these factors contributed to a slow withdrawal from the dispersed settlement in canyons and the re-establishment of residences along Tularosa River. Women continued to dominate settlement patterns by determining when and where the family would move, while men determined land use (Informant D).
CHAPTER V

SPATIAL ORGANIZATION, 1952-1985

Federal Policy of Termination

In 1952 the third event in federal administration of the trust responsibility occurred. The protection of traditions and land afforded Indian cultures under the Indian Reorganization Act was reversed by a policy with the implicit goal of dissolving the responsibilities of the federal government. Tribal councils and reservations were to be terminated under the new policy. The threat of termination was a near fatal blow to Indian ethnicity and the concept of pluralism embraced by the IRA (Fixico 1986).

Policy administrators encouraged Indian families to leave reservations to seek a place in urban America. The federal government offered job placement assistance and financial aid for technical training programs. Once again Indian cultural adaptation was necessary when faced with removal from their land and labor activities that did not conform with Indian culture.

The accomplishments of tribes such as the Menominee in Wisconsin were leveled in the stroke of a pen (Fixico 1986). Other tribes, including the Mescalero Apache, were not terminated. The decision-making process to terminate a tribe or reservation is unclear.
Because the federal government's goal was to terminate as many tribes as possible, little support or assistance for economic or social development was distributed among the tribes. However, economic and social change did occur on those reservations whose financial resources went beyond federal support systems.

Many Native Americans left their reservations during World War II and were living off the reservations in 1952. On the Mescalero Apache Reservation, most of the male work force were active in World War II as laborers in California. Their families remained in New Mexico. After the war, a number of the men remained in California, while others came back to reservation land assignments and lifeways (Informant D).

During the 1950s a letter from the BIA was sent to those Mescalero Apache who were not living on the reservation. The letter stated that the government would terminate any land assignments that were not claimed or in active use by the assignee. Mescalero Apache response was an immediate return to the reservation and none of the land assignments were recovered by the government (Informant D). The government took no further action to enforce the policy of termination on the Mescalero Apache Reservation.

Reservation land use and resource development continued much as it had during the IRA years. Cattle and forestry remained the primary sources of revenue. A series of drought years during the mid-1950s reduced the annual returns on cattle sales while forest receipts remained
steady. Interest in agriculture continued to drop (Informant D).

Improving the Cattle Operation

Membership in the Cattle Growers' Association steadily increased from 101 in 1945 to 244 in 1957. Of this total, 210 were active members; the remaining 34 were non-probated estates. Members of the Association owned cattle herds of various sizes, the smallest being five head, the largest being 200 (Western Farm Management Company 1957).

The cumulative Association herd accounted for one-third of the cattle on the reservation. The other two-thirds were divided between individually-owned cattle and a tribal herd. Despite the low percentage of total cattle on the reservation, the Cattle Growers' Association remained responsible for range conservation on the reservation.

The Association did not produce anticipated revenues in 1957. The two sources of revenue were income from annual sales, and assessments made against individual members of the Association. Profits to the individual and the tribe were small because some individual assessments equaled their sales, thus profits to the individual and the tribe were nonexistent.

Realizing the inadequacies of the cattle operation, members of the Cattle Growers' Association sought professional advice from the Western Farm Management Company of Phoenix, Arizona. The Board of Directors and
representatives of the management company met and discussed the need for a cattle operations management plan. The plan was to include a survey of the reservation in order to determine the resources available, and an operating budget.

Once the scope of work was agreed upon, the Western Farm Management Company conducted a thorough investigation of the history, resources, and potentials of the Cattle Growers' Association. The following information is summarized from the management company's report entitled "Ranch Management Report: Mescalero Apache Indian Reservation," published on September 21, 1957:

1) 200 Indian families were directly dependent upon the cattle operation as their major source of income;
2) the cattle enterprise was not providing maximum income;
3) the cattle operation was archaic and not competitive with other cattle operations; and
4) a major innovative reorganization would be necessary to make cattle production an economic success.

The company concluded that the tribe was dependent upon a revenue-generating operation that was possible, given the range quality and quantity, but that competitive, solid management was necessary if the Association was to generate net profits.

Forage resources in 1957 were described as "a satisfactory balance of feed in practically all areas" (Western Farm Management Company 1957:30). Each pasture
produced a mixture of grasses, forbs, and browse which insured a dependable, year-round supply of feed.

Western Farm Management Company estimated of the total reservation range carrying capacity of 6,500 cattle, a figure below a previous estimated potential of 10,340 mature cows (USDA 1939). The drop in this figure is attributed to a management system based on the use of seasonal pastures and the distribution of the cattle population among a number of pastures.

Having described the potential of the cattle operation, the management company proposed several changes in the association. Their recommendations included:

1) the association should convert to a corporation with members becoming stockholders;

2) a steady, reliable labor force should be hired,

3) a conservative number of mother cows and replacement heifers should be kept on the reservation to ensure calf production;

4) range resources should be used in a planned and systematic way to increase the amount of production per acre;

5) capital investments in fencing, corrals, and water improvements are necessary;

6) 6,500 cows, heifers, and bulls be carried on the range;

7) breeding, branding, and movement of the cattle from winter pasture to summer pasture be accomplished by early summer;

8) fall round-up should be accomplished in one month;
9) disease control, supplementary feeding, bull replacement, and heifer replacement should be carried out when appropriate;

10) herd numbers should be maintained with an eye on cyclic changes in beef demand;

11) weaner calves should be ready for sale by October; and

12) personnel should be hired on a full-time basis.

The recommendations included the division of the reservation into three production units at Three Rivers, Carrizo, and Elk Canyons (Figure 22). Three Rivers, located in the less accessible portion of the reservation west of Sierra Blanca, was recommended as a separate unit to be used on a full-time basis. The unit is low in elevation and year-round temperatures are higher than on the rest of the reservation. An understory of grass and mesquite is found below juniper and cedar. Timber stands of pine, fir, and spruce are found in the higher elevations of the unit. Approximately 275 cows and bulls were recommended as the maximum carrying capacity for the unit. Fence and water improvements were recommended to prevent range deterioration and promote seasonal use of pastures within the unit.

The Carrizo Unit includes the pastures at the eastern base of Sierra Blanca. These pastures are dominated by tall grass openings between stands of pine, spruce, and fir. Oak brush, aspen, and understory browse are common in the unit. The management company recommended that 1,200
cattle be pastured in the unit, using the lower Rinconada as the winter range and the higher Carrizo area as summer range.

Unit 3, east of U. S. 70 and South Tularosa Canyon and west of the main drift fence, was judged to be able to support approximately 5,025 cattle. Winter pastures were assigned maximum capacity figures as follows: Red Lake and No. 5 Pastures, 2,600 head; Purebred Pasture, 400 head; and Indian Pasture, 2,025 head. Between ridges are canyons that afford lush grasses and some drainage attractive for cattle grazing. Indian Pasture is described as a fairly extensive area of short grass range interspersed with juniper. The remaining pastures are dominated by short grasses. Drainage, however, is poor and water improvements were recommended.

The number of cattle recommended for pasture in the three units totalled 6,511. Recommended composition of the herd was 1) 5,400 cows, 2-year-olds and older; 2) 702 replacement heifers; and 3) 409 bulls. The sex ratio was set at one bull per 15 cows. While this ratio was conservative, the lack of fencing and the rough terrain of pastures used during the breeding season required the high cow-bull ratio. The numbers of replacement heifers reflects a standard percentage of heifers retained for breeding purposes, thirteen percent of the total cow population.
The Western Farm Management Company report also recommended changes in personnel management. Before 1957, labor was unreliable, and difficult to hire and supervise. In order to improve labor, the report recommended that all positions be permanently filled on a full-time basis, and that all applicants, including non-Indians, be considered on a competitive basis. The following positions and assigned duties were recommended:

1) Manager: A resident manager should be hired to supervise all activities and employees, help formulate policy, establish the annual operating plan and budget, and authorize expenditures;

2) Well Man and Crew: The well man and his crew would be responsible for maintaining all water facilities and developing new water sources;

3) Camp Bosses and Cowboys: These employees would be responsible for cattle supervision, fence construction and maintenance, and other assigned duties. During the spring the cowboys would gather and brand new calves. Summer months would be spent herding and tending the cattle on summer pastures. Round-up would begin in September. By late fall, cattle would be delivered to buyers or herded to winter pastures. The winter months would be spent in general repair work on all operation facilities and in feeding cattle; and

4) Camp Cook: Hired during round-up, the cook would prepare meals for the cowboys.
The successful operation of the recommended plan was dependent upon the adherence to a budget. Association costs and expenses were figured and balanced against the sale prices of cattle in 1957. The Association did have assets, but they did not equal the amount needed to implement the proposed plan. The management company recommended that the association borrow the money needed to make capital improvements on the land, hire personnel, and purchase supplies for immediate operation.

Personnel was estimated to cost $40,000 annually. Both short term and long term capital improvements were estimated to cost another $270,000. Over a five-year period, the investment in improvements would equal $41.63 per animal based on a 6,500 cattle population.

In summary, the Western Farm Management Company report recommended three main projects that would increase the annual net revenue of the Association and the tribe:

1) Reorganize the Association into a legal corporation and operation under a single brand;

2) Establish competent management and institute sound management procedures; and

3) Develop the range by making capital investments in fencing, corrals, and water sources.

Reorganization of the Association into a corporation would establish stockholders who could buy and sell shares, rather than cattle. The number of cattle would stay constant, while the value of the stock would change to reflect current market prices. Thus, as market prices
increased or decreased, so would the value of the stock (Western Farm Management Report 1957).

The sale of calves would be transacted by auction or private negotiation. While the net income during the first five years would not be great, the adoption of the operating plan over time would, according to Western Farm Management, ensure a profitable enterprise for the Mescalero Cattle Growers' Association.

Adherence to these recommendations, according to Western Farm Management, would gradually increase net revenues. Increases in revenue would be possible due to increasing calf crops. Calf crops, the primary result of improved management, were predicted to increase in Year One of the plan's operation to 40 percent of calves weaned of cows bred, 50 percent in Year Two, 60 percent in Year Three, 70 percent in Year Four, and 80 percent of calves weaned of cows bred in Year Five. The increase represented additional calves available for sale each year. By Year Six the annual gross profits would equal $396,294, with the borrowed money for capital investments being paid back in Years One through Five (Western Farm Management Company 1957).

The management company also developed a time table for implementing the proposed operating plan. Implementation was to begin in 1957 with incorporation of the Cattle Growers' Association. Budgets and the borrowing of investment capital was to be completed in the winter of 1957-58.
A spring round-up was recommended in order to count and brand all cattle with one Association brand. Once initiated, the plan would direct cattle operations and the net revenues from the cattle enterprise would reach the association members and improve economic conditions on the reservation.

In a general, special election held on February 28, 1959, the Mescalero Cattle Growers' Association voted to adopt Articles of Incorporation and By-Laws (Appendix D) as recommended by the Western Farm Management Company report (Informant B). The change in organizational structure included shareholding of cattle by tribal members rather than individually owned cattle within the Association, one brand for all cattle, and the use of tribal forest lands for grazing purposes. The purpose of the Corporation as stated in the Articles is as follows:

"The purposes for which this Corporation is formed is to breed, raise, import, export and principally deal in cattle, horses and livestock and to carry on a general livestock and grazing business, purchasing or acquiring and selling or otherwise disposing, of the stock, feed, supplies, equipment, accessories, appurtenances, products and by-products of said business" (Mescalero Cattle Growers' Association 1959:1)

The adoption of the Articles of Incorporation brought about several changes in the cattle enterprise. Visibly, the cattle were rebranded with a brand resembling a taunt bow, and placed on the left shoulder of all cattle
belonging to the Corporation. This brand indicated a change in the system of ownership.

Individually owned cattle were transferred to Corporation ownership, and the owner received shares in the Corporation in lieu of the cattle. Net profits were divided among shareholders with regard to the number of shares held by Corporation members. Voting privileges in the Corporation were limited to individual members, regardless of the number of shares each member.

Cattle numbers on the reservation were consistent with the recommended carrying capacity of 6,500 cattle. However, the increase in the annual calf crop is more difficult to ascertain. Records of shares, cattle, assets, gross and net revenue, and dividends for the years 1959 to 1968 are incomplete.

The 1963 Financial Report of the Mescalero Cattle Growers' Association, Incorporated is available. These records indicate sums borrowed from the tribe to finance the cattle operation, lists of assets and liabilities, income and expenses, inventory of capital, and accounts receivable.

The report indicates a $135,000 loan from the Mescalero Apache Tribe, payable at an annual amount of $15,000. Assets and liabilities equalled $1,346,307.00 (due to the non-profit status of the Corporation). Sales totalled $288,645.55 while expenses totalled $192,062.41; thus, a net operating income of $96,583.14 was available.
for distribution to members of the Corporation for capital expenditures (Mescalero Cattle Grower's Association 1963).

Additional information in the financial report indicates that the cattle manager, Mr. Frank Burris, took the first inventory of capital in 1963 and instituted a method for keeping accurate financial records for the Corporation (Mescalero Cattle Growers' Association, Inc. 1963). Mr. Burris is also credited with standardizing the Corporation brand and establishing the yearly cycle of calf production as recommended in the 1957 management report (Informant D).

The livestock industry deteriorated by 1965. While management reports and assistance from the BIA specified conditions that would increase the success of the operation, the recommendations were not followed. Calf production and revenue fell to less than the cost of production (Informant D). While the BIA encouraged Mescalero Apache use of the range resource and leadership in decision-making roles market pressures and loss of tribal interest limited the success of the livestock industry.

Forest Management for Tribal Revenue

Tribal administration of forest-related enterprises was encouraged by the BIA in accordance with the termination policy. The agency initiated a forest resource development plan that would allow the tribe to become "self
sufficient on a sound, economic, social, and self-governing basis" (Historical Research Associates 1981:179).

The development plan included provisions for a fund to train tribal members to be professional foresters, the full-time employment of Indians in the Forestry Branch, the development of a Christmas tree enterprise, and identification of the need to attract a pulp mill and charcoal kiln to the reservation. The emphasis on employment and development of a forest products industry on the reservation was welcomed by tribal leaders who were eager to adapt federal policy to meet tribal needs.

The focus of tribal and BIA goals was the sale of the forest reserve. Contracts for the largest number of timber and salvage sales, and Christmas tree harvesting from the reserve were offered between 1950 and 1970 (Figure 23). With an improved road system, the total extent of the timber sales including all of the forest reserve east of Tularosa Canyon, and in the Carrizo district was offered for sale. Salvage sale location was based upon forest improvement needs, fire prevention, and right-of-way needs. The Christmas tree sale units were isolated along the crest of the mountain range due to the desirability of higher elevation species. The entire forest reserve was dedicated to timber stand improvement and harvesting in order to generate revenues and provide economic incentives for Mescalero Apache Tribe.

The primary forest management activity in the early 1960s was the removal of mistletoe-infected trees and the
FOREST LAND USES
1950 - 1970
MESCALERO APACHE RESERVATION

Sierra Blanca
Carrizo Mistletoe Salvage
Summit Recreation Area
Dry Canyon Salvage

N. Tularosa & N. Fork Goat Canyon
South Fork Salvage

Elk Spring
Fire-Killed Timber
Tularosa Canyon Skip Areas

Source: Historical Research Assoc. 1981
MLH 1988

Figure 23
sale of merchantable timber. These activities were balanced with a desire to maintain tribal income. Pre-sale work on salvage and commercial timber sales included aerial photography, topographic mapping, and field surveys by BIA personnel (Historical Research Associates 1981).

Management plans based on the inventory data specified removal of salvage and commercial timber in accordance with sustained-yield forest management prescriptions. The goal of these prescriptions was continuous production with a balance between net growth and harvest. Total actualization of the plan was limited due to labor problems (Historical Research Associates 1981).

While the goals of forest management were clear, maintaining sustained-yield forest practices and satisfying tribal income demands was a difficult balance to attain. Sustained-yield management required expenditures for reforestation and timber-stand improvement. Funds were not always available in the tribal treasury (Historical Research Associates 1981).

Forest improvements were short-term projects, using free labor, planting stock, and cooperative research projects with the USDA Forest Service. In 1963, the tribe received $97,000 of public work funds that were used to reduce forest fire hazards, and to construct visitor facilities, fire detection lookouts, and forest access roads. Overall, forest enterprises during the era were limited by funds, administration, and labor shortages with
limited success at forest improvements (Historical Research Associates 1981).

Despite the tribe’s intent, professional forestry training and full-time employment in forestry was less than successful due to limited funds and tribal member support. The Christmas tree enterprise collapsed in 1960. Negotiations for the pulp mill and kiln were begun but not successfully concluded during the 1950s, thus limiting the total timber harvest (Historical Research Associates 1981).

**Shifts in Residence Location and Housing, 1950 - 1970**

Major changes in residence location and the quality of housing occurred in the mid-1950s and early 1960s. Two research reports written by anthropologists in 1962 and 1963 document these changes. Both studies indicate the preference for matrilocal settlement on the Mescalero Apache Reservation.

One of the anthropologists, Boyer (1962), made an extensive study of socialization among the Mescalero Apache. Her study, conducted between 1958 and 1960, examines the emotional ties between mother and daughter and between sisters, residence preferences, mobility, visiting patterns, and role-modelling for children as an enforcement of traditional culture. The other anthropologist, Kunstadter (1963), identified the Mescalero Apache as a matrilocal society based on conditions of temporary absence of men from homes, Apache bilaterality, and neolocality.
In a later article, Boyer (1964) generally agrees with Kunstadter, and offered strong reasons for her recognition of the Mescalero Apache as a matrilocal group. Both authors recognize residence after marriage as matrilocal, although neolocality was also acceptable.

Matrilocal settlement preference, the organization of family residence and activities around female family members, is clearly demonstrated on the reservation by the migration of nearly all households to Mescalero between 1955 and 1960. The primary reason for the migration was a desire by Mescalero Apache women to live closer together in an easily accessible place (Boyer 1964:597). By 1960 all but 10 of the 1,200 Apaches lived in Mescalero.

The town of Mescalero had 198 inhabited dwellings in 1960, each occupied by one household. Fifty-seven percent of these households involved at least one nuclear family (husband, wife, and children) of which nine percent also included the wife’s relatives, and six percent included the husband’s relatives (Boyer 1964:595). This composition is not based on economic conditions, as suggested by Kundstater (1963), but on matrilocal traditions (Boyer 1964:593).

Household migration in the 1950s not only included the family units, but also the houses constructed in the 1930s (Figure 24). All but a few of the four-room ship-lap houses were moved to Mescalero. The houses were placed within a quarter-mile of each other (Informant C), similar to the clustering patterns of pre-reservation settlement.
described by Basehart (1974). Clustering also reinforced matrilocal relationships.

Houses moved to Mescalero were remodelled to improve living standards on the reservation (Figure 25). Improvements included indoor plumbing and the addition of kitchens and bathrooms to the rear of the dwelling. The original wood siding was removed, insulation was added, and exterior walls of stucco-like material were constructed. Porches were added in many cases and many houses were reroofed. Close examination of these remodelled houses identifies their earlier design and location (Informant D). The earlier locations of the houses can also be observed in the now-vacant canyons. House foundations remain, beside unused barns and chicken coops and unattended apple orchards.

Desertion of outlying canyons in favor of clustered family settlements reinforced the Eastern Apache tradition of clustered residence (Table 12). Of the total 293 residences sixty-eight percent were located at Mescalero. The remaining thirty-two percent were divided between Highway 70, Elk-Silver, Carrizo, Whitetail, Three Rivers, and Nogal. Assuming Boyer is correct in her statement (Boyer 1964:597) that all but 10 Mescalero lived in Mescalero, nearly all of the residences in the outlying areas must have been vacant in 1960.

With the re-settlement in Mescalero, agricultural livelihood dropped dramatically. Income was derived from a number of new sources, the most important being welfare and
Figure 25. Remodelled House

Figure 26. 1960 Houses and Clustering Pattern
<table>
<thead>
<tr>
<th>AREA</th>
<th>NO. OF RESIDENCES</th>
<th>PERCENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Carrizo</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Nogal</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Highway 70</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Mescalero</td>
<td>198</td>
<td>68</td>
</tr>
<tr>
<td>Whitetail</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Elk-Silver</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>293</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
division of communally owned cattle receipts. The welfare income was received by the women while men sought seasonal employment in the lumber mills, or in fire-fighting, cowboying, or forest management. Men returned home as often as possible (Boyer 1964:599).

New housing was constructed by the federal government in the mid-1960s. Crowding intensified the need for new homes, despite the government’s policy of termination. Between 1964 and 1965 two hundred-single and multiple-family dwellings were constructed in Mescalero and in the Carrizo District (Figure 26). The single family dwellings were wood frame with stucco and rock exterior of like floor plan. All multiple family dwellings were constructed in Mescalero within walking distance of the tribal offices, hospital, and service area.

The demand for new housing is an indicator of the rapidly increasing population. In 1960 the U. S. Census (1960) reported a population of 1,294 living on the reservation. In 1962, Boyer (1964:595) reported 1,200 living on the reservation. Since very few Mescalero Apache lived off the reservation, a strong preference for reservation life is evident despite inadequate housing and employment.
Self-Determination and Education Act of 1975

Present federal Indian policy, authorized by the Self-Determination and Education Act of 1975, administers the trust responsibility by including Indian decision-making and preferences in solutions to land use and resource development problems, and tribal education programs. The Bureau of Indian Affairs is directed to assist tribes in economic development—a process including resource inventory and planning—and to provide technical assistance at the tribes' request. The social welfare of Indians is also addressed in education and health programs with funding and administrative assistance (Prucha 1981).

The Self-Determination and Education Act is not a reversal in the federal government's trust responsibilities as administered under the policy of termination. Rather, the Self-Determination Act reinforces the transfer of Indian responsibility to the tribes as expressed in the policy of termination (Prucha 1981). Federal administration and funding continues to support the tribes. Land use decisions are addressed as economic development problems. Residence location is left to the discretion of each tribe, and housing construction and improvements are made possible through federal grants and programs.

The federal government makes several assumptions in enacting the Self-Determination and Education Act. First,
the government assumes that the economic and social organization of tribes will allow them to participate equally with other members of American society. Second, the assumption is made that Indians desire to participate in the American economy. Finally, the 1976 federal policy is based on the belief that Indian populations act as non-Indian populations in terms of demography and cultural preferences.

The federal government also incorrectly assumes that all Indians want the same things. The Indian community at large is divided between traditionalists—those who desire a return to the conditions before the European invasion of North America—and so-called progressives—those who favor a change in Indian attitudes that will afford Indians competitive status with non-Indians (Deloria 1985).

These assumptions are poorly founded. Poverty, hunger, disease, unemployment, and poor educational systems more often describe reservation social atmosphere than an equal standard of living with non-Indian Americans. Many Native Americans identify more strongly with traditional values than with Anglo work ethics and aspirations. Most progressives support acculturation of Native Americans into American society with dignity, while traditionalists would rather not think about American occupation of North America. Tribal leaders are often progressives while the majority of most reservation populations are traditionalists.
Each tribe has its own unique characteristics, its mix of progressives and traditionalists, population growth rates, social problems, and ability to use federal programs. Some tribes are able to support economic development with an abundance of reservation resources while other reservations do not include productive materials. Capital inequities also exist between tribes.

In many cases, additional investment capital is not available from government or private lenders because loans borrowed during the IRA have not been repaid. Labor is a continual problem on reservations where traditional work ethics are not consistent with modern, Anglo work schedules.

Many young Indians do not go to college or trade schools to acquire specialized training, despite encouragement by some tribal leaders. Those who do seek advanced education usually return to their reservations after graduation. Some gradually lose their newly acquired skills because few reservations have diversified economies that can provide appropriate employment. Reservation life tends to reinforce traditional culture as families stay together (Van Otten 1979).

Each tribe is making some progress toward self-determination but federal funding will continue to be a necessary part of the process. The foresight of tribal leaders and availability of economic resources will continue to play an important role in the transfer of responsibilities.
Traditional and progressive thought is evident on the Mescalero Apache Reservation. Traditional customs such as the girl's puberty feasts are celebrated with vigor and the ceremonial crown dancing continues. Progressive thought is also evident in the growing participation in economic enterprises on the reservation. Livestock production, forestry and forest products, and tourism have replaced subsistence patterns of the past. However, the increasing role of these economic endeavors are possible because the tribe's ability to adapt federal policy on traditional occupied lands, manage land communally, and settle matrilocally.

The Mescalero Apache Livestock Industry

Development of the livestock industry as one of the major sources of revenue on the reservation is due in part to the extensive range resources, and partly to the management and leadership system on the reservation. The Mescalero Apache have adapted federal incentives under the Self-Determination Act to develop and manage a livestock enterprise. The communally owned range and the incorporated Mescalero Cattle Growers' Association, Inc. have contributed to the success of the livestock industry.

The cattle operation made substantial gains since 1965 to the present. The success of the operation, compared to previous years, is largely the result of changes in livestock management with one theme in mind, to increase the number and weight of the annual calf crop. Of
the three primary factors that control annual calf crop—range quantity and quality, the number of shares in the Cattle Growers' Association, Inc. and survival rate of calves—only range quality and calf survival could be improved. (Range quality and cattle management increase the weight of calves.)

To achieve success, changes were made in grazing, cattle branding, labor organization, and cattle sales. Each change directly or indirectly contributes to range quality and calf crop. Over time, they have led to larger calf crops with higher average weights.

The Mescalero Cattle Growers' Association, Inc. formalized its method and system of operation in a document entitled "Mescalero Apache Cattle Growers: Plan of Operation" (1978). The plan includes a description of land resources, range use, livestock management practices, marketing, and financial programming. An examination of the plan provides a look at reservation land use with regard to the cattle industry.

Almost the entire 470,234 acres of the reservation, are under permit to the Mescalero Cattle Growers for the purpose of grazing livestock, although the majority of grazing activity occurs in the eastern portions of the reservation due to range conditions and expansion of residential areas west of U. S. 70. Land leased by the corporation is broken into ten land units and authorized, by the tribe, for varying amounts of animal grazing units (Table 13). Grazing units are measured by animal unit
### TABLE 13: PRODUCTIVITY UNITS, 1978

**Mescalero Apache Reservation**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>LOCATION</th>
<th>ACREAGE</th>
<th>A.U.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower Elk, Indian Canyon, No. 4, Turkey Canyon, Sago Canyon</td>
<td>65,864</td>
<td>14,175</td>
</tr>
<tr>
<td>2</td>
<td>Red Lake, Deep Lake, Yellow Well, No. 5, Osborn Tank, Snake Tank</td>
<td>55,506</td>
<td>18,200</td>
</tr>
<tr>
<td>3</td>
<td>No. 2</td>
<td>9,011</td>
<td>2,800</td>
</tr>
<tr>
<td>4</td>
<td>No. 1</td>
<td>13,889</td>
<td>4,632</td>
</tr>
<tr>
<td>5</td>
<td>Pajarita</td>
<td>6,744</td>
<td>1,200</td>
</tr>
<tr>
<td>6</td>
<td>Central Portion of Reservation, Whitetail, Elk Canyon, Silver Canyon</td>
<td>15,700</td>
<td>20,615</td>
</tr>
<tr>
<td>7</td>
<td>Nogal, Capulin Canyon, Apache Canyon, Turkey Pen, Water Canyon</td>
<td>44,944</td>
<td>4,510</td>
</tr>
<tr>
<td>8</td>
<td>Dry Canyon, Carrizo, Cienegita Canyon, Eagle Creek</td>
<td>50,884</td>
<td>7,200</td>
</tr>
<tr>
<td>9</td>
<td>Rinconada</td>
<td>32,808</td>
<td>7,200</td>
</tr>
<tr>
<td>10</td>
<td>Three Rivers</td>
<td>22,884</td>
<td>3,300</td>
</tr>
</tbody>
</table>

**Source:** Mescalero Indian Cattle Growers' Association, 1978
months (AUMs), defined as the amount of forage required by a cow and calf unit equally 1,000 pounds for one month (USDA 1980).

Grazing units 1 through 5 and 9 are used primarily as wintering areas for the livestock herds. Located on the eastern side of the reservation at lower elevations, the primary vegetation is pinyon-juniper. Important grass species in the units are blue grama, Texas timothy, varieties of lovegrasses, muhlies, and other grama grasses. Blue grama is particularly important because it retains nutrient value throughout the winter months. This grass adds to the attractiveness of the lower units as winter pastures. Important forbs and shrubs found in the areas include fourwing saltbrush, fringed sagebrush, winterfat, and several species of oak brush. These plant species provide forage for both livestock and wildlife located in these areas. The units are fringed by ponderosa pine with associated grasses and forbs. Also included within these units is unit 10, Three Rivers, which is grazed on a year-round basis.

Units 6 through 8 are located in the browse, ponderosa pine and spruce-fir-aspen zones of the reservation. These higher elevations are used for summer grazing because of their elevation and vegetative cover. Important grasses found in these locations include various species of fescue, muhly, brome, and bluegrass. Other species identified in the area are wheatgrasses and sleepy grass.
Browse species, located between the pinyon-juniper and ponderosa pine zones, include species of leaf oak, Gambel oak, mountain mahogany, fendler bush, skink bush, and apache plume. Of these species, only Gambel oak is reported in abundance in the higher elevations.

Range conditions on the entire reservation are described as good, although some sites are classified as poor to fair. These poorer areas are generally found in accessible valley bottoms and are the result of heavy grazing pressure. Assistance from county extension agents and federal agencies such as the Fish and Wildlife Service and the Forest Service is routinely sought by the tribe in order to improve range conditions on the reservation (Mescalero Apache Cattle Growers' Association, Inc. 1978).

Season of use studies of dominant grazing plants determine the optimum season for plant productivity. When incorporated with a system of seasonal grazing, pasture productivity and range health can be increased and protected. A season of use was completed for the Cattle Growers' Association, Inc. by the BIA in 1969 (Table 14).

The Mescalero Cattle Growers' Association, Inc. works with the tribe to provide range water sources. Wells, springs, trick tanks, and pipeline are developed and maintained by the Association, Inc. with the improvements becoming tribal capital. Sixty-two stockwater wells are currently located throughout the reservation (Mescalero Apache Cattle Growers' Association, Inc. 1978).
TABLE 14: DOMINANT GRAZING PLANTS, OPTIMUM SEASON OF USE
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>MONTH</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Muhly</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>Bromus species</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sideoats Grama</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Arizona Fescue</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Kentucky Bluegrass</td>
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<td>X</td>
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</tr>
<tr>
<td>Blue Grama</td>
<td>X</td>
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<td>X</td>
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Source: Bureau of Indian Affairs, 1969
Other water sources for grazing purposes include dirt dams that catch spring run-off, drinking rims that receive piped water from well units, and spring tanks in higher elevations. Capital improvements also include fencing projects, installation of cattle guards on reservation roads, and corral maintenance.

While earlier management reports indicate the division of the Mescalero range into higher elevation summer pastures and lower elevation winter pastures, cattle were not always restricted to seasonal pastures because of poor fencing. As a result, range quality decreased as cattle overgrazed the range. In order to improve range quality a drift fence was constructed in 1968 to control cattle movements and restrict summer grazing at lower elevations. The fence traverses the entire length of the reservation from north to south east of the Whitetail District. An additional function of the fence was to exclude cattle from a 160-acre area that was burned by a forest fire in 1951 (Historical Research Associates 1981:181). Approximate location of pastures, water improvements, and the 1968 drift fence appear in Figure 27.

The stockman is responsible for improving the calf crop. He ensures adequate planning, care for the range and livestock, and the delivery of cattle sold. The stockman's duties also include: purchasing cows, bulls, steers, and horses; hiring cowboys and a cook; branding, castrating, and dehorning cattle; rotating cattle from winter range to summer range; establishing a supplemental feeding schedule
during winter months; maintaining a ratio between bulls and cows; protecting cattle from disease and natural disasters; cutting out and delivering to corrals cattle sold at auction; maintaining fences and wells; and reporting to the Board of Directors of the Cattle Growers' Association, Inc.

In addition to supervision of the cattle operation, the stockman also prepares an end-of-the year financial report for the Cattle Growers' Association, Inc. When asked, one stockman said that his job "is to raise cattle, not set policy" (Informant B). Policy decisions rests with the Cattle Growers' Association, Inc. which in turn works with the Tribal Council on matters pertaining to land use and capital investments. The on-the-ground work of maintaining the range and increasing the value of the cattle herd is the stockman's primary task.

The stockman usually hires a crew of twenty men, one cook, and one foreman. While a few of the crew, cook, and foreman remain with the stockman for more than one season, most of the men work one or two years before going on to some other form of employment on or off the reservation. Cowboying is a year-round activity, some months being more active than others (Figure 28).

The yearly cycle begins in March when 50 percent of the calves are born. By the end of April the majority of calves are on the ground. Calves are allowed to strengthen during May when they are moved to traps, small pastures between summer and winter pastures.
SEASONAL WORK–SCHEDULE
MESCALERO APACHE CATTLE GROWERS ASSOC.

Round-up (25.0%)

Feeding (33.3%)

Branding (16.7%)

Herding (25.0%)

Figure 28
During May and June, calves are branded, castrated, dehorned, innoculated against edema and blackleg, and counted. The corporation brand located on the hip to allow a horse-back riger to read it, includes the brand and the year the calf was born. Normally 2,500 to 3,000 calves are branded before July 4th when the entire crew would quit to attend the traditional Mescalero Ceremonial and Rodeo held annually in Mescalero. Once the calves have been branded, all cattle are moved to the high country for the summer months.

July and August are "catch-up" months. During the summer, cattle graze in the higher elevations of the reservation. Cowboys are employed in general maintenance around their quarters, riding fences or repairing fencelines, picking up cattle missed during the spring branding and herding, or preparing for the yearly sale.

The cattle auction is usually held on the last Saturday of August. Buyers are invited to the auction by advertisements placed in livestock publications and newspapers, letters from the corporation, and by word-of-mouth. The auction follows a prescribed schedule. At 6:00 AM, the buyers gather at the Cattle Growers' Association, Inc. in Mescalero for coffee and donuts. Between 8:00 and 11:00 the buyers are taken to a pasture and shown a sample of Mescalero cattle. Once the buyers have appraised the cattle, the tour returns to the Mescalero Community Center for the sale. Within an hour
more than 3,000 cattle, depending on the calf crop for the
year, are sold by sealed bid.

The cattle are sold by contract, not by individual
cow. In other words, a buyer purchases a specified number
of cows. The buyer does not see the actual cows he
purchased; rather, he assumes that cows delivered to him
will be comparable in quality to the cattle he sees on the
morning tour. The stockman puts the best cattle he has on
display to encourage the purchasers and raise the bidding
price.

The sale is generally over by noon and the buyers are
invited to a luncheon at the expense of the tribe. The
annual affair is an important time for buyers and members
of the Corporation to exchange news and renew friendships.
Thus, the auction is as much a social activity as an
exercise in business. When the luncheon is over, many
people choose to attend the horse races in Ruidoso Downs,
five miles from the reservation.

The fall round-up begins in September. Any calf not
branded is cut from its mother, hauled to a trap and
branded. Cattle contracted for sale are moved from the
high summer pastures to loading areas along U. S. 70 where
they are picked up by cattle trucks sent by the
purchasers. The stockman sees that cattle contracted for
sale are delivered. The stockman often reserves 150 calves
from the sale in order to ensure fulfillment of the
contracts. Delivery to the loading areas is usually
accomplished by September 25; after that date the majority
of the cowboys are released from work for the winter months.

For the remainder of the year, various activities including moving replacement heifers and bulls to winter pastures, sale of bulls over eight years old, and final cattle deliveries to buyers are accomplished. All cows are in winter pastures by December 15th (Informant B).

These cattle receive supplemental feed every day at the rate of three pounds per cow, five pounds per bull, four pounds per calf, and three to four pounds per short calf (a calf born too late in the previous year to be sold in the August sale). In open, accessible areas where cattle can be called a supplement of 20 percent protein is used. In inaccessible areas, a 28 percent protein block is used (Mescalero Cattle Growers' Association, Inc. 1978).

January and February are the least active months, and the major activities are the gathering of scattered cattle, purchasing of quality bulls from the surrounding ranches, and feeding of cattle. A ratio of six bulls to 100 cows is maintained for breeding purposes. Supplemental feeding is suspended once the pastures begin to show spring growth or "green up." Calves are dropped in late February and the yearly cycle begins again.

The following example illustrates the movement of one herd of cows and calves over a reservation range (Figure 29). Beginning the year in May, cows and calves wintered in Turkey Anderson Pasture are moved to Pasture No. 3. Here the calves are branded and counted. Once processed,
SEASONAL WORK PATTERN
MESCALERO CATTLE GROWERS' ASSOC.
MESCALERO APACHE RESERVATION

Figure 29
the cows and calves are taken to Charley Tank and turned into summer grazing range located in Elk Spring Burn.

The dry cows are turned into Spur-Lower Indian pasture with bulls. In July the dry cows and bulls are turned into the Bear Canyon area for summer grazing. These cattle are placed in rougher terrain because they do not have calves with them and fall round-up is made easier from this location.

The fall round-up begins in the Elk Springs area by moving cattle west from Harley Ridge, East Telephone Canyon, Morgan Canyon and Cooley Canyon towards Elk Springs where they are corralled. The collected cattle are moved from Elk Springs into Pine Tree Canyon, and finally, to Cow Camp No. 1 where they are delivered to buyers.

Cows with short calves are placed in Pasture No. 3 for the winter. Old cows and bulls that are expected to be sold are cut from the herd and placed in Remuda Well Pasture. Dry cows that are not sold are placed in Yellow Well Pasture. Approximately 600 heifers are kept as replacements, and spend the winter in Weaning Pasture at Well No. 2 (Informant B).

This cycle of range use is duplicated on twelve different pastures within the ten range units previously described. The system maximizes the use of high pastures in the summer and low pastures in the winter, allowing pastures to rest for a season and higher productivity and protection of the cattle. Cattle returned to the same pastures on an annual basis tend to survive seasonal
changes in grass and water resources because they have been on the pastures before. Together, these management practices have increased the annual calf crop, calf weight, and dividends paid to Corporation members.

Reported dividends for the years 1965 to 1984 (Figure 30) indicate a slow increase in value until 1973 when the dollar per share value increased dramatically. The dollar value fluctuated between 1973 and 1978 a high of $.80 per share. After 1980, dividends dropped to $.55 per share. This value has been artificially maintained by subsidizing the market value of $.22 by supporting dividends with funds from a Mescalero Cattle Growers' Association, Inc. reserve. These actions have been necessary to protect the Cattle Growers' Association, Inc. herd in the face of a declining national cattle market.

Between 1965 and 1984, the lowest production of calves, 60 percent, was in 1965 (Figure 31). Since that date the calf crop has increased to a maximum of 85 percent, with an average of 78.15 for the 20-year period. The data indicate a steady increase in calf crop production from 1968 to its highest level in 1973. After 1973, minor changes in calf production are due to yearly weather conditions. For example, late snows in April of 1983 reduced the number of surviving calves (Informant B).

Average calf weight reflects the ability of the range to provide adequate forage, which in turn reflects range and herd management capabilities (Figure 32). The average calf weight at sale steadily increased from 303 pounds in
1965 to 383 pounds in 1984 with yearly fluctuations. While the number of pastured cattle remained consistent during the entire time period, climatic conditions created less than adequate forage in 1967 and 1979 (Informant B). Overall, the improvement of calf weights is due to range improvements and systematic use of pastures (Informant B).

The increases in share value, calf crop, and calf weight are primarily due to improved management of range land and cattle operations. The ability of a stockman to meet the goals of the Cattle Growers’ Association, Inc. is paramount. Since 1965 the presence of a stockman has improved livestock revenues and the overall value of the livestock operation to tribal members. Recent decreases in dividend values are due to a nationally depressed cattle market, a factor beyond the control of the Mescalero Cattle Growers’ Association, Inc.

Horses used in the cattle operation are also grazed on reservation range. A herd of brood mares and one or two studs are owned by the Corporation. Colts born on the reservation are halter broken and added to the total horse population. The Corporation’s herd numbers over 150 (Informant B).

An unknown number of feral horses graze on the reservation range. Popular belief is that the Mescalero Apache value these feral horses and prefer to have them on the range, despite the fact that the horses use pasture that would otherwise contribute to cattle production. A story frequently recited in Ruidoso describes the round-up.
of feral horses by the BIA for free acquisition by the Indians. The horses were claimed by sympathetic Indians and returned to the rangelands (Informant C).

Forest Management During Self-Determination

The Mescalero Apache Tribe plays an active role in managing the reservation's forest resources during the modern era. The tribe quickly responded to the Self-Determination Act and initiated several changes in forest management. Overall, the new direction in tribal decision-making allows the Mescalero Apache to push for intensive forest management in order to increase income from timber sales.

Pressure from the tribe to increase productivity while protecting the forest reserve is expressed in tribal law suits against the BIA and contractors since 1970. The Mescalero Apache also asked for the development of forest inventory and management plans for the 1970s and early 1980s. These two objectives, increased forest productivity and management, are indicative of the tribe's involvement in resource management decision-making and adaptive use of federal policy to meet tribal goals.

Two major sales from the 1960s ended in a series of law suits. The first law suit was filed by the Mescalero Apache Tribe against the BIA for mismanagement of a timber sale known as the Pajarita Sale. The tribe alleged that the BIA "breached its fiduciary duty by failure to timely
or adequately adjust stumpage rates as provided in the contract" (Historical Research Associates 1981:222).

The Mescalero Apache contended that the BIA had misjudged the value of salvage timber in the sale, failed to enforce minimal cutting requirements, and failed to charge adequate rates for stumpage in burn areas within the sale. As a result, the tribe was losing income and interest on current and future sales. The tribe sued on the basis that the monetary returns from the Pajarita Sale were less than expected because of BIA mismanagement of the sale.

The U.S. Solicitor General settled the case by requiring the contractor, White Sands Forest Products, to pay the Mescalero Apache $266,362.55 in stumpage fees and an additional $467,635.40 in interest. The BIA was instructed to increase the profit margin on timber, decrease the cost of salvage removal in the sale, and increase allowances for road construction and reforestation.

A second lawsuit was brought against the BIA by the tribe for mismanagement in the South Block Sale. The suit focused on tribal income lost due to a major forest fire believed to have been started by improper operation and maintenance of a "wigwam wasteburner," a conical shaped superstructure once used to burn sawdust and mill scraps, used by a contractor at Elk Springs mill (Historical Research Associates 1981:237).
The Mescalero Apache contended that Elk Springs fire suppression had cost the tribe $1,095,352 plus damages to the watershed and forage resources. The suit was eventually dropped because of insufficient evidence. The contractor continued to log the sale, not without a closer working relationship with the tribe and the BIA.

The tribe sued again, but instead of suing the contractor for mis-management, the tribe sued the BIA for faulty supervision of the sale and negligent administration of the trust responsibility. Wendell Chino, President of the Mescalero Apache Tribal Council, listed damages incurred by the tribe when the contractor failed to complete the sale as:

1. Stumpage payment deficient $105,866.37;
2. Remaining uncut timber worth $2,912,859;
3. Cost of slash disposal estimated at $157,490.04; and

With addition of interest on the lost value, the final loss to the Mescalero Apache was set at $3,535,467.33 (Historical Research Associates 1981:242).

The tribe admitted partial responsibility, but laid much of the blame on the contractor. The sale was terminated in 1978, with all parties losing monetary and/or administrative benefits. The Mescalero Apache loss was great. Incomes from the sale, Indian employment, protection of the forest reserve, and maximization of
tribal funds were unrealized potentials of the sale (Historical Research Associates 1981:243).

The tribe identified inadequate management and planning of forest resource development by the BIA. Although inventories and plans had been prepared in the past, miscalculations and inept direction were defined as the root of tribal loses. Wendel Chino's efforts to attract forest product industries to the reservation in the 1970s was stalled by the lack of tribal commitment and a constant drain on tribal monies for forest protection and management. Salvage operations, reforestation, small logging operators, unreliable workers, and a depressed forest industries market were constant problems. Low tribal interest in large-scale forest production was also difficult for Chino to overcome.

In 1978 the tribe contracted with George Banzhaf and Company to develop a forest management plan based upon a 1978 BIA forest inventory. The plan included three documents including a timber stand management plan, a series of map overlays, and a market opportunities assessment. Upon review, the documents were rejected as a management plan by the tribe and the BIA on the basis that the inventory data were not satisfactorily used in the planning process (Historical Research Associates 1981).

Forestry and the forest products industry has suffered a decline in recent years. Only one timber contract and one salvage contract were sold between 1970 and 1980 (Figure 33). The stated purpose of the timber sale was to
resale volume remaining on the South Block Logging Unit. In addition, the sale established stumpage fees for use in the tribe's suit against Dugan. The salvage contract was offered in order to eradicate mistletoed trees (Historical Research Associates 1981).

Despite the lack of timber contracts, the Mescalero Apache have taken advantage of the lull in timber prices by working on a forest management plan in cooperation with the BIA. Since 1986, a BIA forest inventory team has estimated the volume and condition of the reservation forest.

The forest plan will determine specific management for Mescalero Apache timber for the next ten years. The BIA has adopted a general plan for all reservation forests that stresses selective cutting and natural regeneration. Selective cutting, as opposed to clearcutting, removes harvestable trees within a stand while allowing younger trees to mature. Timber sales within the same stand will occur on a twenty-year rotation rather than once every fifty to sixty years in a clear-cutting management style. The advantage of selective cutting is that it produces merchantable timber while maintaining the forest environment for other uses. Sustained yields will be attained through natural regeneration (Informant H).

The Mescalero Apache expanded their enterprises in the fall of 1987 with the opening of a tribally owned Apache Timber Products Company sawmill. Following a six year economic feasibility study, the mill was constructed on U. S. 70 just south of Mescalero. The mill was built at a
cost of six million dollars, including grants from the Economic Development Administration, the Administration for Native Americans, and the BIA who loaned the tribe $4.5 million. The sawmill is capable of processing a volume of 18,700,000 logs annually, generating an annual payroll of $750,000 (Jarrell 1987).

Logs will be purchased from the tribe and from the Lincoln National Forest. Since only one other large sawmill exists in the region, at Alamogordo, the Apache Timber Products Company will increase competition and lower the cost of timber sales in the Sacramento Mountains. No active timber sales are currently being conducted on the reservation. Logs processed at the new mill are coming from the national forest. Thus, the Mescalero Apache in effect, are buying cheaper national forest logs while saving reservation timber for a better forest products market.

Tourism

In addition to cattle production and forestry, the tribe has expanded its use of reservation land and federal policy to include tourism. The Sacramento Mountains have attracted outdoor recreationists from the surrounding region for more than one hundred years. The community of Cloudcroft, just south of the reservation, was a popular destination point for tourists from Las Cruces, El Paso, and surrounding desert towns. A narrow gage railroad provided access for travellers to the mountain retreat.
The mountainous region and its attractive environment has not been greatly altered since the late nineteenth century. Most of the reservation is surrounded by the Lincoln National Forest. The U. S. Forest Service's mission is to manage the forest's resources: wildlife habitat, recreation opportunities, watershed protection, timber production, and to provide fire protection. The reservation land and resources are similarly protected by the BIA, although the mission of the BIA is to maintain and protect the resources for the benefit of the Indian population.

The conservation of resources and the natural setting of the area continue to attract tourists to the Sacramento Mountains. Today, Cloudcroft and Ruidoso are popular destination points for west Texans and southern New Mexicans. Realizing the potential for a share of the tourist industry in the area, the Mescalero Apache have developed tourist facilities that rival any in the Southwest.

In 1973 the tribe's Inn of the Mountain Gods was opened two miles within the reservation's northern boundary. Easily accessible from U. S. 70, the Inn offers hotel accommodations, a convention center, an 18-hole golf course, day and night tennis, trout fishing, horseback riding, hiking, swimming, saunas, and trap and skeet shooting. Facilities also include three restaurants and four lounges, live entertainment, and a gift shop (Figure 34).
Figure 34. Inn of the Mountain Gods

Figure 35. Ski Apache
The Inn is a popular convention center for small regional organizations and enterprises. Texans, Mexican nationals, and New Mexicans meet at the lodge throughout the year. A quick check of the parking lot on any given day would reveal that most of the automobiles are registered in Texas. Tourists staying in Ruidoso for horse-racing and parimutual betting at Ruidoso Downs also frequent the Inn for a popular Sunday morning brunch.

Like many Indian reservation groups, the Mescalero Apache have initiated bingo games. Bingo is played at the Inn on Thursday through Sunday, attracting Ruidoso residents and tourists. The potential for casino gambling exists as well, although federal regulations currently prevent the operation of casinos by tribes.

The Mescalero Apache Tribe also owns Ski Apache, a ski area two miles north of Sierra Blanca. The ski area is located on national forest land and is operated on a special use permit from the Lincoln National Forest. At 12,000 feet above mean sea level, Ski Apache is one of the highest ski resorts in the United States. Powder snow conditions are generally good. Thirty-eight ski runs serve a lift capacity of 12,600 skiers per hour (Figure 35).

In addition to the Inn of the Mountain Gods and Ski Apache, the Tribe opens the reservation for elk and deer hunting in the fall. Hunters must purchase a license and may only hunt on the reservation with Mescalero Apache guides. Elk licenses include lodging and meals at the Inn.
of the Mountain Gods, guide services, taxidermy and shipping services.

Elk, hunted to extinction during the nineteenth century in the Sacramento Mountains, were imported to the reservation in 1969 from Yellowstone National Park. Allowed to graze near Pajarita Mountain and Sierra Blanca, the herds expanded until 1975 when the first elk hunting season was opened on the reservation. The elk herd provides a source of large game trophies for hunters who purchase tribal licenses (Informant B).

The recent development of Mescalero Apache resources has diversified tribal income. No longer are the Mescalero dependent upon cattle and forest receipts alone. Tourism, forest products, and livestock production now provide income while conserving the tribe’s land base. Each enterprise generates revenues that continually improve the living standards of the Mescalero Apache while preserving traditional land use and resource development preferences. The ability to adapt federal policy and land uses to meet tribal preferences is evident.

Modern Settlement Patterns

Since 1970, Mescalero residence location and housing conditions have been guided by tribal authority and governmental support. Under the Self-Determination Act, the Tribal Council acts as land broker, determining where residential growth may occur on the reservation. Financial assistance from the U. S. Housing and Urban Development
(HUD) agency and BIA sources has increased the number of residence available for Mescalero Apaches.

Mescalero Apache preference for proximity to neighbors and a desire to maintain large tracts of undeveloped land has greatly influenced the location of modern residences (Table 15; Figure 36). Residential areas in Mescalero and Carrizo Canyon have continued to be preferred sites. Sixty-six percent of all structures are located in Mescalero followed by thirteen percent in Carrizo and along U. S. 70. All other areas total eight percent with Elk-Silver accounting for (half) of these.

With the assistance of HUD grants, new homes have been constructed in these two primary residential areas in the mid-1970s (Informant D). To a lesser degree, new houses also have been constructed along U. S. 70 and at the intersection of U. S. 70 and New Mexico 24.

The new houses are wood framed with stucco and rock exteriors. A floor plan of living room, kitchen, dining area, bath, and three bedrooms is common. The houses are generally located next to the highways and within a quarter-mile of each other. Residential clustering of residences is apparent in all locations.

Out-buildings were not built to accompany the houses, but in most cases residents have constructed small structures near the houses. The most popular out-buildings are horse sheds. In some cases, barns constructed in the
### TABLE 15: RESIDENCES PER SETTLEMENT AREA, 1980
Mescalero Apache Reservation

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RESIDENCES PER SETTLEMENT AREA
1980

MLH 1988

Figure 36
1930s have been converted to garages. The large side doors are convenient for parking automobiles.

In Mescalero, houses, duplexes, and apartments are clustered along streets. The urban fringe is outlined by dispersed single family dwellings. This scattered pattern is repeated in Carrizo, which does not have an urban core. Those houses along the Elk-Silver, Three Rivers, and Nogal drainages were built during the 1930s.

The increase in dwellings reflects the growth in reservation population. In 1970, the population was reported at 1,486 (U. S. Census 1970). By 1980 the population had grown to 1,500 (U. S. Census 1980). Today, the population is estimated to be more than 2,000 (U. S. Census 1985).

The steadily increasing population has brought pressure on existing dwellings. A shortage of houses currently exists on the reservation. Reservation residence is highly valued; extended family residence and the use of temporary housing is becoming common. Mobile homes are beginning to appear in the residential areas while families wait for the construction of additional HUD housing.

Seventy new houses are scheduled to be constructed in 1988. Tribal member requests for these houses have already exhausted the supply and a waiting list for new houses continues to grow. The new housing will be constructed in the Carrizo area in order to shift people from Mescalero to Ruidoso.
Post-marriage residence is becoming more neolocal. Young families tend to look for permanent residence where they can find it. The desire to live in matrilocal kin groups is reported to be diminishing, although certain locations are recognized by all Mescalero to be the home areas of matrilocal family groups. Relationships between wives and close friendships between young girls continue to be reinforced by grandmothers. These residence patterns are subtle and can be recognized only after careful review of residence location and Indian mobility patterns (Informant G).

Only Mescalero Apache tribal members are eligible to occupy land on the reservation. If a Mescalero Apache tribal member desires to acquire land for the construction of a house or the location of a mobile home, the tribal member must appeal to the Tribal Council for a land assignment.

A land assignment is not equivalent to land ownership, because all reservation land is owned by the tribe. The Tribal Council acts on land assignment requests as a representative body of all tribal members. The size of a land assignment varies, depending upon the type of proposed land use. Assignments for house construction are usually two acres in size. A larger area can be obtained if the user intends to pasture horses or raise crops. The use of the land must be sanctioned by the Tribal Council.

Recent shifts in marriage patterns and tribal membership have changed land use and settlement patterns to
some extent. Since 1960 Mescalero teenagers have attended high school in surrounding communities. One of the results of this off-reservation exposure is a change in marriage patterns. Some Mescalero Apache girls have married non-Mescalero Apaches and non-Indians.

Marriage between Mescalero Apache girls and Indians of other tribes or Mexican Americans occurs with some frequency. These girls refuse to leave Mescalero and bring their husbands to live on the reservation. Since the girls are tribal members, they can request land assignments. Decisions about land use, however, are made by the husbands.

This pattern has interesting consequences. While Mescalero Apache men have no interest in farming, approximately 5,000 of the 9,000 acres of available tillable land is farmed by non-Mescaleros, whites, or Mexicans who have married into the tribe (Informant D). This farming is located primarily along Rio Tularosa and in the Elk-Silver drainage. Oats, barley, and alfalfa are the only crops harvested. The amount of land in question is small, but the shift in land use by non-tribal members is of concern to the Tribal Council.

According to the Soil Conservation Service (Neher 1976) environmental conditions prevent the use of land for prime agricultural activities. However, the tribe plans to convert some land to irrigated agriculture. In a pending water rights suit brought by the Mescalero Apache Tribe against the State of New Mexico, the tribe is hoping to
regain water rights it says were part of an 1852 peace treaty between the Mescalero Apache and the U. S. Government (Shepard 1987).

If the tribe wins the suit, the additional water will be used to supply agricultural irrigation and tourist facilities. The tribe anticipates irrigating the Three Rivers area, the Rinconada area, and the Pajarita Canyon area. Crops suggested for these sites include Christmas trees, apples, asparagus, raspberries, strawberries, carrots and potatoes (Shepard 1987). Whether these sites would be opened to residential settlement has not been publicly addressed by the Tribe Council, but informant response indicates that non-Mescalero Apache management and labor would be encouraged at the proposed sites (Informant C).

More important to the Tribal Council is the growing influence of non-Mescalero Apache in land use decisions. The Tribal Council prefers to manage the majority of reservation land for extensive agricultural uses. Large tracts of unbroken land are currently managed for range and forestry outputs. Requests for land assignments that could diminish the effectiveness of the large-scale operations are carefully weighted.

As a result of threats to the land base, accessibility to land assignments is currently under discussion. By limiting the number of tribal members, the Tribal Council could limit the number of land assignments. The results of
these discussions will be known in the future (Informant C).

Land assignments made prior to 1970 are still claimed by assignees. These outlying assignments are commonly used for traditional purposes such as hunting and religious ceremonies. The land assignment is precious to each family for its link to the past (Informant G).
CHAPTER VI

ANALYSIS OF THE DATA

Introduction
Analysis of spatial organization changes over time on the Mescalero Apache Reservation indicates the process of culture change by Eastern Apache. The Mescalero Apache Reservation is located in the central portion of Apacheria, the traditional homeland of the Eastern Apache. Historically, the Eastern Apache resisted the adaptive use of land for sedentary agriculture because of environmental limitations. They chose to respond to the arid environment with hunting and gathering survival strategies.

Today the reservation lands are used for extensive agricultural purposes and the generation of tourist revenues. Residential patterns, while influenced by American cultural practices during four eras of federal policy, currently reflect settlement reminiscent of Eastern Apache land occupation, communal land management, and matrilocal settlement. The adaptive use of land for economic livelihood and residence by the Mescalero Apache is evident in locational, informant, and economic data.
The Livestock Industry

Two types of extensive agriculture—livestock and forestry—are found on the Mescalero Apache Reservation. Each has become increasingly important to the Mescalero Apache spatial organization and economy through time. Locational data and yearly statements for both industries demonstrate the tribe’s successful adaptive use of reservation land and federal policy for development of extensive agricultural purposes.

Use of the reservation for livestock production has played a major role in Mescalero Apache culture change. Range land and portions of the forest reserve provided ample resources for the initiation of a livestock industry. Federal policy consistently supported the introduction and management of livestock on the reservation. Together, these two adaptations contribute to successful development of reservation land in accordance with traditional preferences for communal land management and seasonal work.

Maximization of range resources and cattle production has progressed from an era of Mescalero Apache land leasing and a grazing permit system, primarily by non-Indian ranchers in the region, to collective cattle ownership and ranch management by the Mescalero Apache Cattle Growers’ Association. Cattle, sheep, and goats have been, to varying degrees, consistently present on the reservation since 1880. Since 1934, cattle have dominated the Mescalero Apache livestock industry.
The locations of pastures, productivity units, and range improvements have been modified through time (Figure 37). During the Allotment Act, pastures intended for permittee leases were located in four separate areas of the reservation, all within the forest reserve. Despite the designation of leased pastures, permittee and Indian-owned cattle grazing was trans-reservation until 1945. After 1945 and the incorporation of the Mescalero Cattle Growers' Association during the policy of increased awareness of Indian ethnicity, range and grazing units were more clearly defined. Range improvements, including the establishment of a cow camp and the development of water sources, assisted in the control of cattle movement across the reservation.

The reservation was divided by the Cattle Growers' Association between the Sacramento Mountain high country and eastern low country for grazing and range improvement purposes. This division was based on the natural break in elevation, and informally recognized without the assistance of fencing. Cattle instinctively moved from the high country to pastures at lower elevations in the fall. The cow camp was located at a lower elevation site to feed the cattle during the winter, for spring calving, and for branding in the spring.

In 1957 during the policy of termination, the reservation range was further divided into productivity units by the Western Farm Management study for the Mescalero Apache Cattle Growers' Association. Three major
productivity units—Three Rivers, Carrizo, and Elk-Silver—covered all but the highest and most rugged areas of the reservation. Elk-Silver was the largest unit and included four pastures for specific livestock production purposes. The entire unit corresponded to the low country of the 1945 management system. The Carrizo Unit made use of land on the eastern flank of Sierra Blanca, the Three Rivers Unit utilized pastures on the western flank of the mountain. These two units were in the high country, thus their productivity was limited by seasonal conditions.

Finally, in 1965 major range improvements, supported by BIA and tribal leadership for self-determination, occurred on the reservation. A north-south drift fence was constructed to control cattle access to the high country. The majority of grazing activity was limited to the eastern third of the reservation where additional pastures were fenced, wells and trick tanks installed, and four additional cow camps established. The low country offered better pastures consistently throughout the year.

Control of cattle movement allowed the cattle manager to maintain high range productivity, and thus higher returns to the Cattle Growers' Association members. Further, settlement and competing uses of the reservation were concentrated in the high country making cattle management difficult.

These conditions typify the spatial organization of the livestock industry on the reservation today. Over time, the major location of the cattle industry has shifted
to the eastern lowlands of the reservation. This portion of the reservation provides adequate range conditions throughout the year. It is also an area of limited use by the reservation population. The only competing use of the land is timber harvesting.

As federal policy has increased tribal decision-making in resource development, the tribe has responded by encouraging the use of the communally owned reservation for tribal-member revenues. The tribe has successfully employed the Mescalero Cattle Growers' Association to conserve and adapt range conditions in the development of a viable livestock operation on the reservation.

Forestry

The second form of extensive agriculture visible on the reservation is forestry. The spatial organization of the reservation's timber reserves has changed over time as transportation systems have been improved, tribal needs and tribal leadership roles have increased, and natural hazards have occurred. The areal extent and monetary value of timber and salvage contracts reflect the adaptive use of land and federal policies by the Mescalero Apache.

The location of timber contracts demonstrates the periodic shifts in policy and desired returns from the forest reserve (Figure 38). Timber contracts prior to 1934, during the Allotment Act were located in the southwest portion of the reservation near mill and lumber markets. Profit margins depended upon the ability to get
the logs to the mill and then to the market with the least amount of cost. Indian timber was sold to Anglos by the Indian Service with little imput from the Mescalero Apache, consequently the location of the sales were solely dependent upon the Anglo market and did not reflect the interests of the Indians.

After 1934, federal policy changed under the IRA and timber reserves became a cornerstone of Indian ethnicity. On the Mescalero Apache Reservation the extent of timber contracts were increased to increase tribal revenue. Federal loans assisted in the development of a forest road system, fire prevention work, and forest reserve improvement. However, the location of sales continued to reflect the desire for proximity to lumber markets.

The size of timber contracts reached their highest areal extent during the policy of termination in the 1950s and 1960s. Tribal interest in economic development and revenue returns were supported by the federal push for termination of the trust responsibility. The entire upland pine portion of the forest reserve crest was opened for harvesting during this period. In addition, the tribe attempted to expand its enterprises into the production and sale of Christmas trees along the mountain crest.

Recent timber contracts have been reduced to one sale located in the Nogal Canyon area. The sale's location was determined by forest improvement needs and as a method of establishing a stumpage fee. No contracts for extensive timber harvesting have been awarded since 1980 while the
tribe awaits a BIA forest management plan. The tribe is exerting a stronger leadership role and establishing revenue standards before offering any further timber contracts are sold.

In conjunction with timber harvesting contracts is the sale of salvage contracts (Figure 39). The location of salvage contracts is determined by the occurrence of natural hazards and economic demands on the forest reserve. Salvage activities are located primarily in the upland pine forest area. Specific locations are due to the occurrence of mistletoe, windthrow, and wildfire; and road and powerline right-of-ways. Windthrow occurs most often on the windward, or western, flanks of the Sacramento Mountains. Mistletoe tends to originate in one area and then spread to other areas of the forest reserve. Salvage sales to restrict mistletoe are located in the Carrizo area.

Wildfire occurrence (Figure 40) is sporadic, primarily because of wildfire. In the more remote areas of the reservation wildfire is most often caused by lightning. The most extensive wildfires have been man-caused and are located in areas that have become increasingly more accessible through time. The largest fire, the Elk Springs Fire of 1971, originated at a sawmill.

The location of forestry activities is equally evident in economic and statistical data. Sales before 1940 and after 1955 are few, 26 percent of the total sales, and occur at approximately five-year intervals. The greatest
frequency of timber sales (Figure 41) is clustered between 1940 and 1955, spanning the IRA and early termination periods. The majority of sales, 74 percent, occurred during the IRA period. The highest frequency of sales in one year occurred in 1932, the first year of the IRA.

Sales in the 1940s and 1950s occurred during the Indian Reorganization Act that supported Indian cultural survival by assisting in the development of Indian resources for tribal revenue. In addition, the quality and age of Mescalero Apache timber was attractive to World War II suppliers and post-war builders. Timber sales increased on all forested lands, Indian and non-Indian, during this period.

The infrequency of sales prior to and after the boom demonstrates inept management of Indian forests by the BIA. Before 1935, Indian forest reserves were managed by the Forestry Branch of the Indian Service. Fighting against bureaucratic pressure and competing agencies, J. P. Kinney, the first Forester of the Indian Service (later known as the BIA), successfully gained permission to sell old-growth timber and thin younger stands with partial cutting methods. This sale of old-growth and young timber alleviated disease pressure and increased wildfire protection within the forest reserve.

Following the timber boom of 1940 - 1955, the frequency of sales decreased due to a slower market and the restrictions and inertia of the federal bureaucracy. Once again BIA forest managers are caught between the desire to
FREQUENCY OF TIMBER SALES

Mescalero Apache Reservation

NUMBER OF SALES

YEARS


Figure 41
manage effectively the forests, as required by the trust responsibility, and bureaucratic processes that slowed the rate of timber harvesting. Since the passage of the National Environmental Protection Act in 1969, timber harvests on all federal lands require planning, environmental assessment, and public input.

BIA foresters are currently in limbo, waiting for planning directives from Washington, D.C., assessment of forest volumes and conditions, and tribal input on timber harvest schedules (Informant H). Mescalero Apache and the BIA forest managers are currently in the process of compiling a timber inventory and a plan for future activity. No active timber sales are occurring on the reservation at this time.

Timber harvesting on the reservation from 1919 to 1976 is measured in million board feet (Figure 42). The volume of timber sold is highest during the 1940s and 1950s timber boom. The lack of federal administrative support in timber harvesting is evident in the limited volumes cut prior to and after the boom.

The age and condition of the Mescalero Apache forest can be determined by identifying periods of high volume cut. Kinney’s push to harvest old-growth timber is evident in the 1919 sale of 144 million board feet. This harvest volume was not equalled until 1964 when 142 million board feet were cut. Using the 1919 and 1964 years as benchmarks in timber growth, a cutting cycle of 45 years can be assumed for the reservation’s timber. Volumes cut between
Figure 42: TIMBER VOLUMES CUT
MESCALERO APACHE RESERVATION

MILLION BOARD FEET

YEARS

1919 1929 1939 1949 1959 1969

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
the benchmark years represent timber protection practices, including partial cut harvesting for disease and fire prevention.

While a cutting-cycle can be extrapolated from the volume data, other factors must be taken into account before such an evaluation can be made. For example, the Mescalero Apache forest reserve was threatened by an infestation of dwarf mistletoe during the 1940s and 1950s. Timber harvesting to eradicate the fungus and war time demands increased the volume cut of all aged timber during the time period.

The exceptionally high volume of timber cut in 1938 is the result of a shift in the management of the Mescalero Apache forest reserve. A 1938 management plan allowed for higher volumes of timber harvesting at the expense of future forest productivity and health. Market prices also play a part in determining when timber volumes are cut.

Normally, timber is left standing until a favorable market, but the need for immediate cash often forces a timber supplier to sell at a low market price. Due to Mescalero Apache cash flow problems, the Mescalero Apache sold timber during a 1964 timber recession (Historical Research Associates 1981). The market conditions and the fungus infestation indicate that other forces determine when, what, and how much Mescalero Apache timber is put on the market.

Federal policy and timber demand appear to be the strongest elements in timber harvest decision-making. Both
graphs (Figures 41 and 42) indicate an increase in timber harvest activity during the IRA and World War II. Lack of activity during other policy eras demonstrates the affects of federal bureaucratic intervention in Indian timber management and lower value timber markets.

While locational and economic data demonstrate the changes in forest land use and economic outputs over time, the transformation in decision-making roles and responsibilities are equally important in Mescalero Apache adaptation of the reservation’s reserves. During the Allotment Act, the federal government was in direct control of the reservation’s forest reserves. Kinney’s role as Forester of the Indian Service included reservation visitations to assess the forest reserve extent as well as an administrative capacity in Washington, D.C. He visited the Mescalero Apache Reservation in 1914 and in 1919 (Historical Research Associates 1981).

John Collier, proponent of the federal recognition of Indian ethnicity, identified forestry and forest products as one of the primary sources of economic return for western reservations. Under his administration of the BIA during the Indian Reorganization Act, forest practices were intensified to benefit the tribes. On the Mescalero Apache Reservation individual Indians participated in logging operations and the tribe sold standing timber to purchase goods and provide services on the reservation. A greater participation in timber sale decision-making and control of
earned revenues were the consequence of IRA policies on the Mescalero Apache Reservation.

Tribal response to the policy of termination (1952-1976) was to keep selling timber for the benefit of the tribe. Goals to expand use of the forest reserve for revenue generation and Indian employment were identified by the Tribal Council. Achievement of these goals, however small, are evident in land use patterns of the period.

Finally, modern interpretation of the trust responsibility with administration of the Self-Determination Act has placed the Tribal Council in the lead role of decision-making with assistance from the BIA. The tribe is currently waiting for BIA planning to establish environmental limits of logging and a higher paying timber market. The tribe is now in the role of decision-maker while the BIA provides support and assistance in cooperation with the tribe.

Management of range and timber resources is an important element in Mescalero Apache spatial organization. Both forms of extensive agriculture are managed in a manner similar to the Eastern Apache resource holding capacity previous to reservation settlement. The dynamics of livestock production and forest products enterprises require large areas of land, strong leadership, and communal ownership of the range and forest for maximum production. These elements of spatial organization have been achieved with Mescalero Apache adaptive use of federal
policy and environmental limitations of the reservation to meet traditional land use preferences.

Tourism

Historical data indicate the increasing importance of tourism in Mescalero Apache land use as a means of adapting federal policy and land to meet traditional preferences for extensive areas of undeveloped land. The Mescalero Apache desire to diversify their economy and increase tribal revenues without altering the reservation’s physical landscape (Informant G). From the perspective of spatial organization, tourism is located in two places, the Inn of the Mountain Gods in Carrizo Canyon and Ski Apache on the north face of Sierra Blanca.

The economic value of tourism on the reservation is difficult to quantify. The Inn of the Mountain Gods provides hotel services for recreational visitors to nearby Ruidoso and therefore experiences use rates similar to the services available in Ruidoso. The area experienced its best revenues in 1985 and 1986 (Informant I).

Texas, Arizona, and California are the primary sources of recreationists, followed by Florida and Georgia winter recreationists. Despite the recent depression in the Texas oil industry, New Mexico tourism developers anticipate further growth in the Ruidoso market. One informant noted that "the recreation market niche of Ruidoso is still being flushed out. A lack of advertising dollars is currently hindering the area. People come to
New Mexico for outdoor recreation, the weather, and the scenery. Ruidoso including the Inn, can provide these better than any other spot" (Informant I).

An increase in Ruidoso's tourism is anticipated with the recent opening of a regional airport. Improvements in the Albuquerque airport (175 miles from Ruidoso) will attract international flights to the region. The volume of Albuquerque air travel has doubled since 1978 and is expected to double again in the next five years (Informant I). Recreation volume will improve if the Ruidoso Regional Airport can maintain direct air service to Albuquerque and other Southwest cities on a year-round basis.

The success of tourism has a direct impact on Mescalero Apache tourist industries. Horse-racing and outdoor activities bring tourists to the area. The Inn of the Mountain Gods attracts summer tourists and benefits from the neighboring tourist attractions including Ruidoso Downs and the Lincoln National Forest.

Ski Apache is the only tourist attraction in Ruidoso open during the winter. Since the ski area is unable to provide over-night lodging and meals, the Mescalero Apache are dependent upon Ruidoso businesses to provide over-night accommodations beyond the Inn's capacity.

The success of Ski Apache is primarily dependent upon yearly snowfall and skier visitation. The annual amount of snowfall varies; the highest snowfall accumulation was in 1972 (Figure 43). The number of days Ski Apache is open per year also varies (Table 16), but no obvious correlation
### TABLE 16: DAYS OF OPERATION AT SKI APACHE, 1964 - 1982

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DAYS OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>105</td>
</tr>
<tr>
<td>1965</td>
<td>123</td>
</tr>
<tr>
<td>1966</td>
<td>107</td>
</tr>
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<td>1967</td>
<td>135</td>
</tr>
<tr>
<td>1968</td>
<td>147</td>
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<tr>
<td>1969</td>
<td>130</td>
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<tr>
<td>1970</td>
<td>87</td>
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<tr>
<td>1971</td>
<td>122</td>
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<tr>
<td>1972</td>
<td>120</td>
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<td>1973</td>
<td>126</td>
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<tr>
<td>1974</td>
<td>157</td>
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<tr>
<td>1975</td>
<td>112</td>
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<tr>
<td>1976</td>
<td>129</td>
</tr>
<tr>
<td>1977</td>
<td>109</td>
</tr>
<tr>
<td>1978</td>
<td>140</td>
</tr>
<tr>
<td>1979</td>
<td>120</td>
</tr>
<tr>
<td>1980</td>
<td>137</td>
</tr>
<tr>
<td>1981</td>
<td>124</td>
</tr>
<tr>
<td>1982</td>
<td>137</td>
</tr>
</tbody>
</table>

Source: Informant F
exists between the amount of snowfall and the number of possible days of skiing. In other words, a minimal amount of snow can still provide a long ski season if seasonal temperatures remain low; conversely, a high amount of snow can rapidly disappear with high seasonal temperatures, and provide a short ski season. Even with the use of snow-making machinery, the Mescalero Apache cannot control the length of the skiing season.

Skier visitation is, to some degree, manageable by the owners of the resort. Advertising and attractive prices encourage skiers to visit the resort. General trends in U.S. and Mexican economy also have an impact on the number of skiers who visit Ski Apache. Skier visitation has varied over time, but in general it has steadily increased (Figure 44). The highest number of visitors was recorded in 1983 during the height of the 1983 oil business boom in New Mexico and Texas (Informant F).

During the 1960s and early 1970s, the average number of skiers per day was less than 1,000 (Figure 45). After 1976 the resort grew in popularity and the average number of daily skiers increased to 1,600 per day in 1979. Snowfall in 1980 decreased, causing a decrease in daily attendance (Informant F). 1981 and 1982 saw a return to the number of skiers experienced in 1979. Data for 1983 through 1985 are not available.

The value of Ski Apache to the Mescalero Apache economy is limited. Since the ski area is located on U.S. Forest Service land, the tribe is charged an annual
SKIER VISITATION

SKI APACHE RESORT

Figure 44
user fee. The daily cost of a ski ticket must include the user fee and maintenance costs of the chair lifts. The tribe must also compete with other Southwest ski areas (Informant F).

The profits made by ski area developers are derived from amenities such as lodging and shops. The tribe is unable to build these facilities at the ski area because of limited terrain, access, and lack of capital. Terrain and access to the ski area is controlled by the U.S. Forest Service.

Development of the Inn of the Mountain Gods placed a heavy financial burden on the tribe’s treasury and investment capital necessary to expand Ski Apache is not available at the present time. The resort provides employment for Mescalero Apache and area residents, but does not generate profits for the tribe (Informant F). The future of Ski Apache appears to be somewhat limited due to an unstable market area and the lack of tribal capital.

Relationships between Ruidoso businesses and the Mescalero Apache have not always been cordial, and a general climate of distrust exists between the two groups. A major source of friction between the two groups is the fact that the Indians do not pay state or local taxes. Therefore, Mescalero Apache do not contribute to regional improvements, such as the airport, but receive the benefits of public services.

A second source of distrust is the lack of communication between the two groups. The Mescalero Apache
have not collaborated with Ruidoso businesses to create ski packages that would include Ruidoso accommodations. Further, hunting on the reservation is limited to those who purchase a Mescalero Apache hunting license that includes accommodations at the Inn. This requirement creates an Indian monopoly on the lodging of hunters.

Overall, the relationship between the tribe's tourism managers and the managers of Ruidoso facilities is less than workable. This condition must be remedied if both Ruidoso businesses and the tribe hope to compete in the Southwest tourist market (Informant I).

Tourism adds to the Mescalero Apache economy at an unknown rate. The greatest attraction of tourism for the tribe is that it provides a return while requiring little cost of Mescalero Apache land and resources. For example, very little land is taken up by the Inn, elk herds can be maintained and managed with the help of federal agencies such as the BIA and the U.S. Fish and Wildlife Service. In addition, Ski Apache is located off the reservation.

The analysis of tourism is more important as an indicator of spatial organization and response to environmental limitations than economic return. Equally significant is the spatial organization of extensive agriculture since reservation assignment. Spatial organization of range, forestry, and tourism activities and their economic value have evolved through time with changes in the administration of the trust responsibility.
Settlement Patterns

Settlement patterns are also indicative of Mescalero Apache adaptive use of federal policies and the environmental setting. Archeological, historical and modern data indicate shifts in residential location because of contrasts between the administration of federal policy, physical limits on intensive farming, and tribal settlement preferences. Over time the preferences of the tribe have taken precedent, demonstrating a cultural bias for matrilocal residential clustering without a dependence upon the availability of tillable land.

Archeological data recovered by BIA personnel during a 1980 survey of the central section of the reservation confirms settlement patterns found in historic data (Figure 46). Sites dating earlier than 1950 were recorded. These sites included camp-sites from the pre-reservation period, and residential and commercial sites following reservation assignment (Harrill 1980).

The number and distribution of residences is also estimated from archival and field sources (Table 17; Figure 47). There is an over-all preference for settlement in the Mescalero, along U. S. 70, and at Carrizo. Settlement in these areas has remained relatively high during all time periods, while Elk-Silver and Whitetail were abandoned after 1940. The number of residences at Three Rivers and Nogal has not changed through time.
Figure 46
Clustering patterns (Figure 48) by site area indicate a preference for close proximity to neighbors. Only during the 1930s and 1940s were the Mescalero Apache forced to live on more than two-acre residence sites. Prior to and after the IRA, the Indians adapted federal policy and reservation land to meet their preference for one-acre residence sites. Residential land assignments in the 1980s have risen to two acres in order to accommodate larger homes and out-buildings while maintaining a sense of neighborhood.

The occurrence of specific house types can be grouped by federal policy eras (Figure 49). During the Allotment Act the federal government tried to impose log house construction and occupancy upon the Mescalero Apache. The Indians preferred house type was their traditional teepees and oak arbors. By 1934 ship-lap houses were constructed for each family. The houses were simple four-room abodes without running water. These houses were remodelled by the BIA during the 1950s. Modern house types include apartments, ranch-style houses, and trailers. The apartments and ranch-style houses are all of the same design due to construction codes of federal housing projects.

Settlement patterns are also influenced by the number of reservation residents. Normally, only Mescalero Apache live on the reservation. Non-tribal residents either marry into the tribe or are invited to live on the reservation by a tribal member. Reservation population, as reported in
TABLE 17: RESIDENCES PER SETTLEMENT AREA, 1920 - 1980
Mescalero Apache Reservation

<table>
<thead>
<tr>
<th>AREA</th>
<th>1920</th>
<th>1940</th>
<th>1960</th>
<th>1980</th>
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</thead>
<tbody>
<tr>
<td>Three Rivers</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Carrizo</td>
<td>4</td>
<td>18</td>
<td>20</td>
<td>74</td>
</tr>
<tr>
<td>Nogal</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Highway 70</td>
<td>4</td>
<td>25</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>Mescalero</td>
<td>16</td>
<td>88</td>
<td>198</td>
<td>367</td>
</tr>
<tr>
<td>Wetulet</td>
<td>20</td>
<td>24</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Elk-Silver</td>
<td>8</td>
<td>40</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>60</td>
<td>206</td>
<td>293</td>
<td>552</td>
</tr>
</tbody>
</table>
Figure 49
the U. S. Census thus indicates tribal population. Reservation population since 1880 at a growth rate of 1.8 percent (Figure 50).

At a growth rate of 1.8 percent, the projected population in the year 2020 will be 4,073. This population growth will require the rapid construction of new houses, increased tribal, public, and commercial services, and economic growth to provide for the increased population needs. The future tribal living standards depends upon the tribe's ability to provide for these needs.

The current tribal leadership is addressing these potential growth characteristics. Residential, economic, and social service planning is evident in tribal land use decision-making. The current water-rights suit, that would provide additional water resources and potential agriculture and industrial development on the reservation, are examples of economic planning.

Analysis of land use patterns indicate an increasing adaptive use of federal policies and environmental limitations by the Mescalero Apache Reservation to meet spatial organization preferences practiced prior to reservation assignment. These changes are documented by locational data, informants, and economic data. All three sources indicate the increasing role of tribal preferences and Eastern Apache culture in the evolution of spatial organization on the reservation. Tribal President Wendal Chino reiterated this view of culture change in a recent statement: "We shall continue to expand our efforts to do
PROJECTED POPULATION INCREASE
MESA CAIRO APACHE RESERVATION

Figure 50
those things we believe will improve the quality of life for our people" (Jarrell 1987:1).
CHAPTER VII

EASTERN APACHE ADAPTIVE USE
OF FEDERAL INDIAN LAND POLICIES
ON THE MESCALERO APACHE RESERVATION

Changes in the Native American relationships to land, a topic of human ecology, demonstrate Indian adaptive use of federal policy and land. This research identifies the process of Eastern Apache culture change by measuring and evaluating changes in land occupation and spatial organization of resources and settlement patterns since reservation assignment in 1883 on the Mescalero Apache Reservation.

Eastern Apache-land relationships are evident on the Mescalero Apache Reservation despite the events of reservation assignment and enforcement of four federal Indian land policies. In a little over a hundred years the Eastern Apache have changed from hunting and gathering bands to a sedentary, economically diverse tribe known as the Mescalero Apache. This transition has been necessary in order to function within American society. More subtle, however, is the maintenance of Eastern Apache land occupation, land uses, and settlement patterns.

The ability of the Mescalero Apache to retain landscape patterns of land occupation, communal land management, and matrilocal settlement due to a unique set
of cultural, historical, and environmental conditions. The location and environmental limitations of the Mescalero Apache Reservation, inconsistent application of federal Indian land policies, Eastern Apache land use patterns, that exemplify goals of federal policy, and the leadership capacity of Mescalero Apache tribal chairmen have served to maintain Mescalero Apache land occupation, communal land management, and matrilocal settlement.

The Eastern Apache were assigned to a reservation approximately three-hundredths the area of their traditional homeland in Apacheria. The location of the modern reservation is at a relatively high elevation with little precipitation and poorly developed soils. The Eastern Apache bands had adapted these environmental limitations to meet their subsistence needs prior to reservation assignment. These limitations later served to protect the reservation from allotment and the Mescalero Apache from enforced adaptation of intensive agriculture.

A series of events in United States administration of the trust responsibility challenged the Mescalero Apache’s abilities to maintain pre-reservation land occupation and use traditions (Table 18). Two events that have proven to be the most destructive to other Native American groups—the Allotment Act and the policy of termination—were not enforced on the Mescalero Apache Reservation. The concepts of communal ownership and resource management espoused during the IRA and Self-Determination periods resemble Eastern Apache
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<td>Anglo-American Agricultural Land Uses and Settlement Patterns Enforced by U.S. Government</td>
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<td>Self-Determination</td>
<td>Apache Decision-making in Forestry Range, and Tourism Land Uses Apache Settlement Patterns Dominate Residence Choices</td>
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pre-reservation cultural preferences with regard to land occupation and use. Each policy event brought about an adaptation of the reservation by the Mescalero Apache that exhibited Eastern Apache land use and settlement preferences.

Livestock production, forestry, and tourism have become increasingly important since the Indian Reorganization Act. The increasing direction of federal policy to place the burden of resource development on Native Americans has been successfully adapted by the Mescalero Apache. Communal ownership of the reservation, environmental constraints, the resource-holding tradition, and the development of tribal leadership have aided in the adaptive process.

The reservation has been communally owned since its creation in 1883. Enforcement of the Allotment Act was not experienced on the reservation except in the attempt to control land and settlement patterns. The reservation was not divided into allotments based on environmental constraints and the advisement of the reservation agent. Environmental conditions, however, favored the development of extensive agriculture. The Mescalero Apache adapted livestock production and forestry given the range and forest resources.

The tribal government and the cattle growers association formed during the Indian Reorganization Act resemble the resource-holding capacity characteristic of Eastern Apache hunting and gathering prior to reservation
assignment. These modern land uses require the management of large land reserves and mutual agreement by all resource users to protect and conserve the reservation land base. The tribe has responded to the modern need for resource conservation and production with the institution of management teams and effective tribal leadership.

The settlement patterns also illustrate the ability of the Mescalero Apache to adapt federal policy and environmental constraints to Eastern Apache location preferences. Since the reservation was not allotted, settlement location was due to Mescalero Apache preference. Except during the IRA, the Indians settled where they preferred. Pre-reservation matrilocal clustering patterns, modified by technology, are evident on the modern reservation. Today, the Tribal Council takes an active role in determining the location and size of residential land assignments.

As a result of environmental, historical, and cultural conditions, the process of culture change by the Eastern Apache is less than the federal government envisioned one hundred years ago. The modern Mescalero Apache Tribe is a strong Native American culture group, with a steadily increasing population, economic investments and potentials, and resource reserves. Modern tribal leadership continues to ensure Eastern Apache spatial preferences.

The federal government's attempt to enforce cultural assimilation of Native Americans was promoted by land policies that removed the majority of Native Americans from
traditional homelands and restructured Indian spatial organization. The loss of some homelands and land use traditions has often served to weaken Indian cultures to the point of total cultural collapse. Cultural collapse is not occurring on the Mescalero Apache Reservation. One reason for the survival of Eastern Apache culture is the group’s ability to adapt land, environmental conditions, and federal policies to meet their cultural preferences for the occupation of Apacheria, communal land management and matrilocal settlement.

The persistence of Eastern Apache culture on the Mescalero Apache Reservation is due in part to the adaptive use of reservation land and resources, and federal Indian-land policies. Cultural survival by the Mescalero Apache is more probable due to the persistence of land relationships than the survival of those groups whose land relationships have been broken.
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Walling, Willoughby
APPENDIX A

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

AMENDED CHARTER
of the
MESCALERO APACHE TRIBE, INC.
NEW MEXICO

RATIFIED AUGUST 1, 1936
AMENDED DECEMBER 18, 1964

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AMENDED CHARTER
of the
MESCALERO APACHE TRIBE, INC.

SECTION 1. In order to further the social welfare and development of the Mescalero Apache Tribe and of its members, there is hereby issued by the Secretary of the Interior this Amended Charter of incorporation to the tribe under the corporate name "The Mescalero Apache Tribe, Inc.", hereinafter referred to as the Corporation.

Sec. 2. The Corporation, as a federally-charter corporation, shall have perpetual existence.

Sec. 3. The members of the Corporation shall be all persons now or hereafter qualified as members of the Mescalero Apache Tribe, as provided by its duly ratified and approved constitution.

Sec. 4. The persons who are the duly constituted President, Vice-President, Secretary, and Treasurer of the Mescalero Apache Tribe shall comprise the Board of Directors of this Corporation and shall exercise all of the corporate powers herein enumerated. The Board of Directors shall operate under bylaws and procedures approved by the Mescalero Apache Tribal Council. The persons who are the duly constituted officers of the constitutional entity known as the Mescalero Apache Tribe shall also be the officers of this corporation (serving in corresponding offices), and shall have full power and authority to exercise all powers granted to them by this charter or delegated to them from time to time by the Board of Directors.

Sec. 5. The Corporation, subject to all applicable federal laws, shall have the following powers:

(a) To adopt, use, and alter a Corporate Seal.
(b) To purchase, take by gift, bequest, or otherwise acquire, own, hold, manage, operate, encumber and dispose of, property of every description, both real and personal, subject to the following limitation:
   The Corporation shall have no control over any property, funds, or other tribal assets unless the tribal council, acting pursuant to the authority of the tribal constitution, shall have previously transferred such tribal property, funds or other tribal assets to the control of the Corporation.
(c) To borrow money from any source whatsoever without limit as to amount, and on such terms and conditions and for such consideration and periods of time as the Board of Directors shall determine: to use all funds thus obtained to promote the social welfare and betterment of the tribe and of its members; to finance corporate or tribal enterprises; to pay outstanding indebtedness of the tribe or of any corporate or tribal enterprise; or to lend money thus borrowed.
(d) To engage in any business or activity that will further the social welfare and betterment of the members of
the Mescalero Apache Tribe not inconsistent with law or any provision of this charter.

(e) To make and perform contracts and agreements with any person, association or corporation; with any municipality, county, state, or with the United States. Provided: That any contract involving the payment of money by the Corporation in excess of the sum of twenty thousand ($20,000) in any one year shall be subject to the approval of the Secretary of the Interior.

(f) To pledge, mortgage, convey, assign or use corporate assets as security for the repayment of any indebtedness incurred by the Corporation pursuant to this charter.

(g) To deposit to the credit of the Mescalero Apache Tribe, Inc. assets of the Corporation without limitation on the amount in any account in any bank whose deposits are insured by any agency of the Federal Government.

(h) To sue and to be sued in courts of competent jurisdiction within the United States, but the exercise of this power shall not be deemed a consent by this Corporation or by the United States of America to the levy of any judgment, lien or attachment upon the property of the tribe other than income, chattels or other property specifically mortgaged, pledged or assigned.

(i) To issue interests in Corporation property in exchange for restricted Indian lands.

(j) To exercise such further incidental powers not inconsistent with law as may be necessary to the conduct of corporate business.

Sec. 6. Upon the request of the tribal council for termination of any supervisory power reserved to the Secretary of the Interior under Section 5(e) hereof, the Secretary of the Interior, if he shall approve such request, shall thereupon submit the question of such termination to the corporate membership. The termination shall be effective, and the charter duly amended, upon ratification by a majority vote at an election in which at least thirty percent (30%) of the adult members of the Corporation residing on the Reservation shall vote.

Sec. 7. No property rights of the Mescalero Apache Tribe shall in any way be impaired by anything contained in this charter. The property individually owned by members of the tribe shall not be subject to any corporate debts or liabilities.

Sec. 8. During each fiscal year the Board of Directors shall use all income in excess of the amounts needed to establish a reserve fund to meet corporate obligations and finance the activities of the Corporation for the social welfare and betterment of the tribe.

Sec. 9. The officers of the Corporation shall maintain accurate and complete public accounts of the financial affairs of the Corporation, and shall furnish an annual balance sheet and report of the financial affairs of the Corporation to the Commissioner of Indian Affairs.

Sec. 10. This charter shall not be revoked or surrendered except by Act of Congress, but amendments may be proposed by
resolution of the tribal council which, if approved by the Secretary of the Interior, shall be effective when ratified by a majority vote of the adult Corporation members living on the Reservation, at a popular referendum in which at least thirty percent (30%) of the eligible voters cast their ballots.

SEC. 11. This Amended Charter shall be effective from, and after, the date of its ratification by a majority vote of the adult members of the Mescalero Apache Tribe living on the Mescalero Reservation, at a popular referendum in which at least thirty percent (30%) of the eligible voters vote. Such ratification shall be formally certified by the Superintendent of the Mescalero Apache Agency and the President of the Mescalero Apache Tribe.

APPROVAL

The attached Amended Charter of the Mescalero Apache Tribe, Inc., is herewith approved and submitted for ratification by the adult members of the tribe living on the Mescalero Reservation pursuant to the authority vested in the Secretary of the Interior by the Act of June 18, 1934 (48 Stat. 984), as amended by the Act of June 15, 1935 (49 Stat. 378).

JOHN A. CARVER, JR.
Assistant Secretary of the Interior

WASHINGTON, D. C., December 11, 1964

CERTIFICATION OF RATIFICATION

Pursuant to an election authorized by the Secretary of the Interior on December 11, 1964, the attached Amended Charter of the Apache Tribe of the Mescalero Reservation in New Mexico, was submitted to the adult members of the Reservation and was on December 18, 1964, duly ratified by a vote of 206 for, and 86 against, in an election in which at least 30 percent of the 511 members entitled to vote cast their ballots in accordance with Section 17 of the Indian Reorganization Act of June 18, 1934 (48 Stat. 984).

KENNETH L. PAYTON
Chairman, Election Board
CHRISTIE LA PAZ
Election Board Member
ALTON PEPO
Election Board Member

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APPENDIX B

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS

REVISED
CONSTITUTION OF THE APACHE TRIBE
of the
MESCALERO INDIAN RESERVATION
NEW MEXICO

APPROVED MARCH 25, 1936
REVISED JANUARY 12, 1965

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REvised
Constitution of the Apache Tribe
of the
MescaleRo Reservation

Preamble

We, the members of the Apache Tribe of the Mescalero Reservation, in order to promote justice, insure tranquility, encourage the general welfare, foster the social and economic advancement of our people, safeguard our interests, bring our representative tribal government into closer alignment with State and National governments, and secure for ourselves and for our posterity the blessings of freedom and liberty, do hereby establish this revised constitution as the foundation upon which our tribal government shall rest.

Article I — The Mescalero Apache Tribe

Section 1. The Apache Tribe of the Mescalero Reservation, hereinafter referred to as the Mescalero Apache Tribe, shall include all persons recognized as members thereof, or upon whom membership may be conferred, pursuant to the provisions and restrictions imposed by Article IV of this constitution, irrespective of the Apache Band with which they may be identified.

Article II — Territory

Section 1. The jurisdiction of the Mescalero Apache Tribe, its tribal council and courts shall extend to all the territory within the exterior boundaries of the reservation, and to such other lands as may be added thereto by purchase, gift, Act of Congress, or otherwise.

Article III — Reservation Lands

Section 1. Title to reservation lands shall remain tribal property and shall not, in whole or in part, be granted by allotment or otherwise to tribal members or groups of members as private property. The control of reservation lands, and of assignments or leases thereof, and of other tribal property, shall be in the tribal council, subject to applicable Federal authority, and regulated by ordinances not inconsistent with or contrary to this constitution.

Sec. 2. The tribal council shall have power to assign unused tribal lands, or to reassign any unused assignments, or portions thereof, which have been idle for two (2) or more years. No reassignment of a homestead may be made so long as the original assignee shall reside on the homesite, unless he shall voluntarily release the homesite to the tribe. A member may transfer his homesite to one of his children. The tribal council shall decide by ordinance what shall constitute a unit for purposes of assignment of land for private use, and shall determine the rules governing the use and transfer of such assignments.

Sec. 3. A non-member who is the surviving spouse of a member of the tribe shall have the privilege to use an assignment for
the benefit of enrolled minor children, but a non-member shall not acquire any vested interest or rights in any tribal property, except as otherwise provided by ordinance of the tribal council, or by applicable Federal law.

**ARTICLE IV — MEMBERSHIP**

**SECTION 1.** The membership of the Mescalero Apache Tribe shall consist of the following persons:

(a) Any person whose name appeared on the Census Roll of the Mescalero Apache Agency of January 1, 1936.

(b) All persons born to resident members after the census of January 1, 1936, and prior to the effective date of this constitution.

(c) Any child born to a non-resident member, prior to the effective date of this constitution, provided that such child shall have resided on the Mescalero Reservation for not less than one (1) year immediately preceding the date of enrollment.

(d) Any person of one-fourth degree or more Mescalero Apache blood, born after the effective date of this constitution, either one or both of whose parents is (are) enrolled in the membership of the Mescalero Apache Tribe.

**Sec. 2.** No person, being enrolled or recognized as a member of another tribe, shall be eligible for enrollment in the Mescalero Apache Tribe.

**Sec. 3.** The tribal council shall have the power to adopt ordinances, consistent with this constitution, governing future membership, loss of membership, and the adoption of members into the Mescalero Apache Tribe, which ordinances shall be subject to review by the Secretary of the Interior.

**Sec. 4.** The tribal council shall have the power to prescribe rules to govern the compilation and maintenance of a membership roll, and to make corrections in the basic roll, subject to the approval of the Secretary of the Interior.

**Sec. 5.** The constitution of the Mescalero Apache Tribe, and ordinances enacted pursuant thereto, shall govern tribal membership and enrollment. No decree of any non-tribal court purporting to determine membership in the tribe, determine paternity, or determine the degree of Indian blood, shall be recognized for membership purposes. The tribal council shall have sole authority and original jurisdiction to determine eligibility for enrollment, except where the membership of an individual is dependent upon an issue of paternity, in which case the trial court, or the tribal council sitting as an appellate court, shall have authority and exclusive jurisdiction.

**ARTICLE V — BILL OF RIGHTS**

**SECTION 1.** Subject to the limitations prescribed by this constitution, all members of the Mescalero Apache Tribe shall have equal political rights and equal opportunities to participate in the economic resources and tribal assets, and no member shall be denied freedom of conscience, speech, religion, association or assembly, nor shall he be denied the right to petition the tribal council for the redress of grievances against the tribe.
ARTICLE VI — DISQUALIFICATION OF TRIBAL MEMBERS FOR ELECTIVE OFFICE

SECTION 1. No person who has been convicted of any felony or other serious offense, including adultery, bribery, embezzlement, extortion, fraud, forgery, misbranding, perjury, theft, habitual drunkenness, or felonious assault or felonious battery, shall be eligible for candidacy to any elective office of the Mescalero Apache Tribe unless he shall have been pardoned by the President of the Mescalero Apache Tribe in conformity with applicable ordinances and procedures prescribed by the tribal council.

ARTICLE VII — ORGANIZATION OF THE GOVERNMENT OF THE MESCALERO APACHE TRIBE

SECTION 1. The powers of the government of the Mescalero Apache Tribe are divided into three distinct departments, the Legislative, the Executive and the Judicial, and no person or group of persons charged with the exercise of powers properly belonging to one of these departments, shall exercise any powers properly belonging to either of the others, except as this constitution may otherwise expressly direct or permit.

ARTICLE VIII — PART I — THE LEGISLATIVE DEPARTMENT: COMPOSITION AND QUALIFICATIONS

SECTION 1. The legislative powers of the Mescalero Apache Tribe shall rest in the Mescalero Apache Tribal Council, hereinafter referred to as the tribal council, which shall hold its sessions at the seat of the tribal government.

Sec. 2. The tribal council shall consist of eight (8) members, elected at large from the membership of the Mescalero Apache Tribe.

Sec. 3. The members of the tribal council shall be at least twenty-five (25) years of age at the time of election or appointment (Article X, Section 4); shall have one-quarter or more Mescalero Apache Indian blood; shall have resided on the Mescalero Apache Reservation for a period of at least six (6) months immediately prior to the election, and shall be subject to the restrictions set out in Article VI.

Sec. 4. No person shall serve as a member of the Mescalero Apache Tribal Council while holding any other elective office, or policy making position with the tribe or with any organization doing business on the Mescalero Reservation.

ARTICLE IX — NOMINATIONS AND ELECTIONS

SECTION 1. An election board, appointed by the president of the Mescalero Apache Tribe, shall supervise and administer all elections in accordance with established tribal ordinances, and in conformity with this constitution: provided that no member of the election board shall be at the same time a member of the tribal council or a candidate for tribal office, and provided further that persons so appointed by the president shall be confirmed by the tribal council.

Sec. 2. Any member of the Mescalero Apache Tribe shall have the right to vote in any tribal election provided such member:
Sec. 2. (a) Is at least twenty-one (21) years of age at the time of such election.
(b) Has resided within a fifty (50) mile radius of the tribal administration office, which office is located on the reservation, for a period of at least six (6) months immediately prior to the day of election.

Sec. 3. Members of the tribal council, and all other elective officials of the Mescalero Apache Tribe, shall be chosen by secret ballot, the form of which shall be established by ordinance enacted by the tribal council.

Sec. 4. The tribal council, by ordinance, shall make provision for absentee voting, including the use of a secret ballot for this purpose.

Sec. 5. No member of the Mescalero Apache Tribe shall be deprived of his right to vote, if otherwise qualified, because of temporary absence from the reservation. Temporary absence shall be defined, for purposes of this section, as follows:
(a) Absence for the purpose of attending an educational institution for purposes of obtaining formal training, or
(b) Absence for purposes of receiving treatment at a regular hospital, clinic or sanitarium, or
(c) Absence for purposes of service in the Armed Forces of the United States, or
(d) Absence for purposes of obtaining additional educational training in regularly held training sessions, or
(e) Absence for any other reason which does not exceed six (6) months' duration, immediately preceding a tribal election, without return to the physical limits of the reservation.

Sec. 6. Any qualified member of the Mescalero Apache Tribe who desires that his (her) name be placed on the ballot as a candidate for the office of president, vice-president or council member in the primary election shall file with the tribal secretary a statement of intention showing his (her) name and the office for which he (she) desires to become a candidate. Such statement shall be filed not less than fifteen (15) days preceding the primary election.

Sec. 7. A primary election to select candidates for the offices of the president, vice-president and council members shall be held at least thirty (30) days before the general election of the tribe. The two nominees receiving the highest number of votes for president shall be the only candidates for the office of president at the next general election. The two nominees receiving the highest number of votes for vice-president shall be the only candidates for vice-president in the next general election. The eight nominees receiving the highest number of votes, for council members shall be the only candidates for council members in the next general election.

Sec. 8. General elections to vote for tribal council members and all elected officers of the Mescalero Apache Tribe shall be held annually on the third Friday of December. Notice of both the primary and general elections shall be posted at least thirty (30) days before each such election at the voting place and in three (3) or more additional public places. Such notice shall be posted by the secretary of the tribal council. In case the time of the general
election should conflict with a holiday, the election shall be held on the following work day.

Sec. 9. No candidate shall be permitted to withdraw except by filing a written notice thereof with the tribal secretary at least twelve (12) days before the primary and the general election. The tribal secretary shall post the names of all candidates at the voting place, and at three or more additional public places at least ten (10) days before the primary and general election.

Sec. 10. The first election of tribal council members and officers under this constitution shall be held on the first general election date following its adoption and ratification. The candidate with the highest number of votes for the office of president shall hold the office for two (2) years. The candidate with the highest number of votes for the office of vice-president shall hold that office for two (2) years. The four candidates receiving the highest number of votes for council member-at-large shall hold office for two (2) years. The four candidates receiving the next highest number of votes for council member-at-large shall hold office for one (1) year. Tie votes shall be decided by lot. The term of office for these newly elected council members shall start on the second Friday of the month of January following the election, at which time the incumbent business committee will be dissolved.

Sec. 11. Succeeding members of the Mescalero Apache Tribal Council shall be elected to serve for a term of two (2) years, with one-half of the members-at-large thereof elected each year. The term of office of newly elected members shall start on the second Friday of the month of January following the election.

Sec. 12. The candidate receiving the highest number of votes at the general election for the office of president shall become the president. The candidate receiving the highest number of votes at the general election for the office of vice-president shall become the vice-president.

Sec. 13. The four candidates for the office of councilman-at-large receiving the highest number of votes cast in each general election, and the winning candidates for the office of president and vice-president, shall be certified to the tribal council by the election board as the duly elected councilmen and officers of the tribe.

Sec. 14. No person shall be a candidate for more than one office in any primary election.

Sec. 15. Any tie vote shall be decided by lot before the tribal council.

ARTICLE X - VACANCIES AND REMOVAL FROM OFFICE

SECTION 1. Any member of the tribal council or elected officer of the Mescalero Apache Tribe who, during the term for which he is elected, is convicted of any felony, shall automatically forfeit his office. Any member of the tribal council or elected officer found guilty of a misdemeanor involving moral turpitude, gross neglect of duty, malfeasance in office or misconduct reflecting on the dignity and integrity of the tribal government, may be removed from office by majority vote of the tribal council. Before any vote for removal from office is taken, such member or officer shall be given a written statement of the charges against him at least five (5)
days before the meeting of the tribal council before which he is to appear, and he shall be given an opportunity to answer any and all charges at the designated council meeting. The decision of the tribal council shall be final.

Sec. 2. Upon receipt of a petition signed by at least twenty-five percent (25%) of the eligible voters demanding recall of any member of the tribal council, or elected officer, filed with the secretary of the tribal council at least four (4) months before the expiration of such council member's, or official's, term of office, it shall be the duty of the tribal council to call a special election upon the question of recall. Such election shall be held not less than twenty-five (25) nor more than forty (40) days from the filing of the petition. No council member or elected officer may be recalled unless a majority of the members voting vote in favor of the recall, and unless at least thirty percent (30%) of the eligible voters vote in the election.

Sec. 3. If a member of the tribal council fails to attend two (2) successive meetings of the tribal council or a committee thereof, of which he is a member, or any combination of tribal council or such committee meetings, he shall automatically cease to be a member of the tribal council. In such event, the tribal council shall declare the position vacant and the president shall, subject to confirmation by the tribal council, appoint a successor to serve the unexpired term, unless such member

(a) is excused by the tribal council, or

(b) is absent by reason of illness, or due to reasons beyond his control, which are satisfactory to the tribal council.

Sec. 4. In the event of a vacancy, for any cause, in the membership of the tribal council, the unexpired term corresponding to the vacancy shall be filled by a qualified person, appointed by the president and confirmed by the tribal council.

ARTICLE XI - POWERS OF THE TRIBAL COUNCIL

SECTION 1. The Mescalero Apache Tribal Council shall have the following duties and powers subject to all applicable laws of the United States, this constitution, and the regulations of the Secretary of the Interior.

(a) To veto the sale, disposition, lease, or encumbrance of tribal lands, interest in lands, or other tribal assets, that may be authorized by any agency of government without the consent of the tribe; and any encumbrance, sale, grant, or lease of any portion of the reservation, or the grant of any rights to the use of lands or other assets, or the grant of relinquishment of any water or mineral rights or other natural or fiscal assets of the Mescalero Reservation, are hereby reserved to the sanction of the tribal council.

(b) To encumber, lease, permit, sell, assign, manage or provide for the management of tribal lands, interests in such lands or other tribal assets; to purchase or otherwise acquire lands or interests in lands within or without the reservation; and to regulate the use and disposition of tribal property of all kinds.
(c) To protect and preserve the property, wildlife and natural resources of the tribe, and to regulate the conduct of trade and the use and disposition of tribal property upon the reservation, provided that any ordinance directly affecting non-members of the tribe shall be subject to review by the Secretary of Interior.

(d) To adopt and approve plans of operation to govern the conduct of any business or industry that will further the economic well-being of the members of the tribe, and to undertake any activity of any nature whatsoever, not inconsistent with Federal law or with this constitution, designed for the social or economic improvement of the Mescalero Apache people, such plans of operation and activities to be subject to review by the Secretary of the Interior.

(e) To use tribal funds as loans or grants, and to transfer tribal property and other assets, to tribal corporations, associations, commissions or boards for such use as the tribal council may determine in conformity with this constitution and consistent with applicable Federal laws and regulations.

(f) To authorize the president to negotiate contracts, leases and agreements of every description not inconsistent with Federal law or with this constitution, subject to review or approval by the Secretary of the Interior where such review or approval is required by statute or regulations; Provided, that all contracts, leases and agreements so negotiated shall be subject to approval by the tribal council.

(g) To acquire, by condemnation, lands of tribal members on the reservation, for public purposes, provided that such members shall be reimbursed the full value of improvements they have placed on such lands as determined by appraisal. The manner of appraisal and the procedures governing condemnation shall be established by ordinance of the tribal council, subject to review by the Secretary of the Interior.

(h) To regulate its own procedures, including the adoption and amendment of bylaws; to appoint subordinate boards, commissions, committees, tribal officials and employees not otherwise provided for in this constitution and to prescribe their salaries, tenure and duties; to charter tribal corporations, and to charter and regulate other subordinate organizations for economic and other purposes, subject to review by the Secretary of the Interior when required by Federal law or regulation.

(i) To represent the tribe and act in all matters that concern the welfare of the tribe and to make decisions not inconsistent with, or contrary to, this constitution.

(j) To negotiate with the Federal, State, or local Governments, and to advise and consult with representatives of the Interior Department on all activities that may affect the reservation, and in regard to all appropriation estimates and Federal projects for the benefit of the tribe.
before such estimates or projects are submitted to the Bureau of the Budget and to Congress.

(k) To borrow money from the Federal Government or other lenders for tribal use.

(l) To administer any funds or property within the exclusive control of the tribe, and to make expenditures from available funds for public purposes of the tribe, including salaries and remuneration of elective officials, officers and tribal employees. With the approval of the Secretary of the Interior, tribal funds from any source may be authorized for dividend or per capita payments to the members of the tribe.

(m) To administer charity.

(n) To make loans to tribal members in accordance with regulations of the Secretary of the Interior, this constitution and other applicable laws.

(o) To employ legal counsel for the protection and advancement of the rights of the tribe and its members, the choice of counsel and fixing of fees to be subject to the approval of the Secretary of the Interior, so long as such approval is required by Federal law.

(p) To enact ordinances, subject to review by the Secretary of the Interior, establishing and governing tribal courts and tribal law enforcement agencies on the reservation; regulating social and domestic relations of members of the tribe; including provision for the issuance of decrees of divorce, provided that all marriages between tribal members shall be in conformity with applicable laws of the State; providing for the appointment of guardians for minors and mental incompetents; regulating the inheritance of personal property of tribal members; and providing for the removal or exclusion from the reservation of any non-members of the Mescalero Apache Tribe whose presence may be injurious to tribal members or to the interests of the tribe, as determined by the tribal council.

(q) To issue to each of its members a non-transferable certificate of membership, evidencing the equal share of each member in the assets of the tribe, said tribe being in the nature of a non-profit corporation, and to use any net income return to the tribe from corporate enterprises for public and social purposes of the tribe.

(r) To administer oaths; to require, upon proper notice being given stating time and place of hearing and the general nature of the subject to be discussed, any member of the tribe to appear and give testimony before the tribal council; and to provide by ordinance, subject to review by the Secretary of the Interior, for punishment of such members upon failure to comply with such requirements, or for giving false testimony.

(s) To enact and provide for the enforcement of ordinances, subject to review by the Secretary of the Interior, for the assessment of taxes, licensing and other fees on
persons or organizations doing business on the reservation.
(t) No authority or power contained in this constitution may be delegated by the Mescalero Apache Tribal Council to tribal officials, committees, or associations to carry out any functions or do any thing for which primary responsibility is vested in the tribal council, except by ordinance or resolution duly enacted by the tribal council.
(u) To deposit, to the credit of the Mescalero Apache Tribe, tribal funds, without limitation on the amount in any account, in any National or State bank whose deposits are insured by any agency of the Federal Government; Provided, that advances to the tribe from funds held in trust in the United States Treasury shall be deposited with a bonded disbursing officer of the United States whenever the conditions prescribed by the Secretary of the Interior in connection with such advance, require that the advance be so deposited.
(v) To exercise tribal powers independently, under this constitution, whenever limitations on such free exercise of tribal powers, imposed by regulations of the Secretary of the Interior, are removed; to exercise other inherent powers not heretofore exercised or included in this constitution; and to exercise powers which have been excluded from tribal authority by applicable statutes of Congress, in the event such statutes are amended or rescinded; provided, that except for waiver of Secretarial review or approval authority, the exercise of additional tribal powers, by the tribal council, shall be in conformity with appropriate amendments to this constitution, pursuant to the provisions of Article XV and Article XXVII hereof.

ARTICLE XII - REVIEW AND APPROVAL OF ENACTMENTS

SECTION 1. Every resolution or ordinance passed by the tribal council shall, before it becomes effective, be presented to the president for approval within five (5) days following the date of its passage. If he approves he shall sign it within ten (10) days following its receipt and deposit it with the Secretary of the Mescalero Apache Tribe for such further action as may be necessary. If he does not sign an enactment of the tribal council, he shall, at the next meeting of the tribal council following its submittal to him for signature, return it to the tribal council with a statement of his objections. It shall thereafter not become effective unless it is again approved by two-thirds of the members present, providing that those present constitute a quorum of the tribal council.

Sec. 2. Every resolution or ordinance which, under this constitution is subject to review by the Secretary of the Interior, shall be, within ten (10) days following its approval by the president or, in the event of presidential veto, by a two-thirds majority of the tribal council as provided in Section 1 of Article XII above, presented to the Superintendent of the Mescalero Reservation.
Within ten (10) days after receipt thereof, the Superintendent shall approve or disapprove the same.

Sec. 3. If the Superintendent shall approve any resolution or ordinance subject to review by the Secretary of the Interior, it shall thereupon become effective, but the Superintendent shall transmit a copy of the same, bearing his endorsement, to the Secretary of the Interior, who may within ninety (90) days from the date of such approval by the Superintendent rescind the said resolution or ordinance for any cause, by transmitting notification to the President of the Mescalero Apache Tribe of such rescission.

Sec. 4. If the Superintendent shall refuse or fail to approve any resolution or ordinance submitted to him within ten (10) days after its receipt, he shall advise the tribal council of his reasons therefor, and if the reasons appear to the tribal council to be insufficient it may, by majority vote, refer the resolution or ordinance to the Secretary of the Interior who shall, within ninety (90) days from the date of receipt, approve or disapprove same in writing: Provided, however, that such resolution or ordinance shall become effective ninety (90) days after the date of receipt unless the Secretary of the Interior shall disapprove in writing such resolution or ordinance.

Sec. 5. Any resolution or ordinance that is, by the terms of this constitution, subject to the approval of the Secretary of the Interior, shall be presented to the Superintendent who shall, within ten (10) days after receipt thereof, transmit the same to the Secretary of the Interior with his recommendation for or against approval.

Sec. 6. The said resolution or ordinance shall become effective when approved by the Secretary of the Interior.

Sec. 7. Upon request by the tribal council, the Secretary of the Interior may waive any requirement contained in this constitution relating to review or approval of resolutions and ordinances, or to the exercise of other powers of the tribal council. Such waiver shall be for such period of time and under such conditions as the Secretary of the Interior may prescribe.

ARTICLE XIII - TRIBAL BUDGET AND BUSINESS ENTERPRISES

SECTION 1. Before the beginning of each fiscal year, the tribal council shall adopt and approve an annual tribal budget providing funds for the support of all approved tribal programs. No expenditures of tribal funds may be made except in conformity with the approved budget. The annual tribal budget shall be subject to such review and approval as may be required by the Secretary of the Interior.

Sec. 2. The Mescalero Apache Tribal Council shall, by ordinance, establish the principles and policies governing the operation and control of all enterprises of the tribe.

ARTICLE XIV - REFERENDUM

SECTION 1. Upon receipt of a petition signed by at least thirty percent (30%) of the qualified voters of the tribe and filed with the secretary of the tribal council demanding a referendum thereon, any proposed or enacted resolution, ordinance or other action of the tribal council shall either be repealed by the tribal council or be submitted by it to the electorate for decision by the tribe.
in a general election to be held within thirty (30) days after receipt of the petition. The referendum shall be conclusive only if at least thirty percent (30%) of the qualified voters cast their ballots therein.

Sec. 2. When a majority of the members of the tribal council shall request a referendum on any proposed or enacted resolution, ordinance, or other action of the tribal council, the tribal council shall call an election within thirty (30) days thereafter at which the members of the tribe shall approve or disapprove, by majority vote, the ordinance or action in question; Provided, however, that such approval or disapproval shall be effective only in the event thirty percent (30%) or more of the qualified voters cast their ballots in such election.

Sec. 3. No referendum conducted pursuant to the provisions of Section 1 above shall serve to abrogate, modify, or amend any properly approved contract or agreement with third parties who are not members of the Mescalero Apache Tribe.

ARTICLE XV - CONSTITUTIONAL AMENDMENT

SECTION 1. This constitution may be amended at an election called by the Secretary of the Interior upon request by the tribal council:

(a) Whenever, by majority vote of all members of the tribal council, the governing body of the tribe shall authorize the submission of a proposed amendment to the electorate of the tribe, or,

(b) Whenever a minimum of thirty percent (30%) of the qualified voters of the tribe, by signed petition, shall request such amendment.

Sec. 2. If, at such election, the amendment is adopted by majority vote of the qualified voters of the tribe voting therein, and if the number of ballots cast represents not less than thirty percent (30%) of the qualified voters, such amendments shall be submitted to the Secretary of the Interior and, if approved by him, it shall thereupon take effect.

ARTICLE XVI - SESSIONS OF THE TRIBAL COUNCIL

SECTION 1. The tribal council shall meet, upon 24 hours written notice to the membership thereof by the president, at the seat of tribal government, as provided in the bylaws; Provided, that not less than four (4) quarterly sessions shall be held in any year.

Sec. 2. Special sessions of the tribal council may be convened by the president or, if the president shall refuse to act, such special sessions may be convened by any three (3) members of the tribal council upon twenty-four (24) hours written notice signed by said three (3) members.

ARTICLE XVII - QUORUM; VOTE

SECTION 1. Six (6) members of the tribal council shall constitute a quorum of the membership thereof, provided that the vice-president of the tribe may vote as a member of the tribal council throughout the whole of that meeting only if a quorum is not otherwise present. No enactment of the tribal council shall have
any validity or effect in the absence of a quorum of the membership thereof.

Sec. 2. No resolution or ordinance of the tribal council shall have any validity or effect unless it is passed by the tribal council at a legally called session in which a quorum of the membership was present, and until approved by the president or passed over his veto as provided by Article XII.

**ARTICLE XVIII - ORDINANCES AND RESOLUTIONS**

**SECTION 1.** All final decisions of the tribal council, on matters of permanent interest to members of the tribe and necessary to the orderly administration of tribal affairs, shall be embodied in ordinances, the format of which shall be established in the bylaws of the tribal council. Such enactments shall be available for public inspection at all reasonable times by members of the tribe.

**Sec. 2.** All final decisions of the tribal council on matters of temporary interest, or matters relating to particular individuals, officials, or circumstances shall be embodied in resolutions. Such actions of the tribal council shall also be subject to public inspection by members of the tribe.

**ARTICLE XIX - PART 2 - THE EXECUTIVE DEPARTMENT:**

**COMPOSITION AND MANNER OF SELECTION**

**SECTION 1.** The Executive Department of the Mescalero Apache Tribal Government shall consist of a president, a vice-president, a secretary, and a treasurer.

**Sec. 2.** The President and Vice-President of the Mescalero Apache Tribe shall be elected. The remaining officers shall be appointed by the president with the concurrence of the tribal council, and persons appointed to fill such offices shall serve during the pleasure of the president, provided that the tribal counsel must concur in the removal from office of any such appointive officer of the tribe.

**ARTICLE XX - PRESIDENT AND VICE-PRESIDENT:**

**TERM OF OFFICE AND QUALIFICATIONS**

**SECTION 1.** The President and Vice-President of the Mescalero Apache Tribe shall be elected for a term of two (2) years. Candidates for the office of president and vice-president must possess the same qualifications required of candidates for council membership as set forth in Article VIII, Section 3 of this constitution. The term of office of the president and vice-president shall begin at the same time as the terms of members of the tribal council elected at the same election.

**ARTICLE XXI - PRESIDENT AND VICE-PRESIDENT:**

**VACANCIES AND REMOVAL FROM OFFICE**

**SECTION 1.** In the event of a vacancy, for any cause, in the office of the president, the vice-president shall assume the duties of the president until a successor has been duly elected and qualified. In the event of a vacancy, for any cause, in the office of the vice-president, such vacancy shall be filled by a tribal member appointed by the tribal council, such person to serve until a successor has
been duly elected and qualified. In the event of a vacancy, for any cause, in both executive offices, such vacancies shall be filled at a special election, called by the tribal council and conducted in conformity with applicable sections of Article IX of this constitution; except that the membership of the election board shall be appointed by the tribal council.

**ARTICLE XXII - DUTIES OF OFFICERS**

**SECTION 1.** The President of the Mescalero Apache Tribe shall exercise the following powers as the chief executive officer of the tribe:

(a) The president shall serve as the Chairman of the Mescalero Apache Tribal Council, but he shall not have the right to vote on any issue except to break a tie vote of the council in the absence of the vice-president.

(b) The president shall appoint all non-elected officials and employees of the executive department of the tribal government and shall direct them in their work, subject only to applicable restrictions embodied in this constitution or in enactments of the tribal council establishing personnel policies or governing personnel management.

(c) The president, subject to the approval of the tribal council, may establish such boards, committees or subcommittees as the business of the council may require, and shall serve as an ex-officio member of all such committees and boards.

(d) The president shall serve as contracting officer for the Mescalero Apache Tribe, following approval of all contracts by the tribal council.

(e) The president shall have veto power over enactments of the tribal council, as provided in Article XII, Section 1.

(f) Subject to such regulations and procedures as may be prescribed by ordinance of the tribal council, the president shall have power to grant pardons, after conviction for all offenses, to restore tribal members to eligibility for elective office in the tribal government, subject to the restrictions contained in Article X, Section 1.

(g) The president shall direct the tribal police, to assure the enforcement of ordinances of the tribal council.

(h) The president shall hold no other tribal office or engage in private remunerative employment without the consent of the tribal council, during his term as president.

**SEC. 2.** In the absence of the president, the vice-president shall preside and shall have all powers, privileges and duties of the president.

**SEC. 3.** The vice-president may function as chairman of the tribal council or of any committee thereof in the absence of, or at the direction of, the president. When presiding as chairman of the tribal council he shall have the right to vote only in the event the council or any committee thereof is equally divided on an issue. In his capacity as vice-president, he may be counted for purposes of constituting a quorum at any such meeting and when so count-
ed may vote on any business then before the council.

Sec. 4. The vice-president may attend any session of the tribal council or of any council committee and he may participate therein, but he shall not have the right to vote unless required to make a quorum or to break a tie.

Sec. 5. The vice-president shall perform such other duties as the president, with the consent of the tribal council, may direct.

ARTICLE XXIII - THE SECRETARY OF THE MESCALERO APACHE TRIBE

SECTION I. The Secretary of the Mescalero Apache Tribe shall be appointed from within the membership of the tribal council.

Sec. 2. The secretary shall call the roll, handle all official correspondence of the council, keep the minutes of all regular and special meetings of the tribal council, and it shall be his duty to submit promptly to the Superintendent of the agency copies of minutes of all regular and special meetings of the tribal council. Following each general election, the secretary shall certify to the Superintendent of the reservation the duly elected president, vice-president, and councilmen. In the absence of the president and vice-president, the secretary shall carry on the duties of the president, subject to all restrictions thereon embodied in this constitution.

ARTICLE XXIV - TREASURER OF THE MESCALERO APACHE TRIBE

SECTION I. The treasurer shall be appointed from within the membership of the tribal council.

Sec. 2. (a) The treasurer shall accept, receipt for, keep and safeguard all funds under the exclusive control of the tribe by depositing them in a bank insured by an agency of the Federal Government, or in an Individual Indian Money Account as directed by the Mescalero Apache Tribal Council, and shall keep an accurate record of such funds and shall report on all receipts and expenditures and the amount and nature of all funds in his custody to the council at regular meetings and at such other times as requested by the council. He shall not pay or otherwise disburse any funds in his custody except when properly authorized to do so by the council.

(b) The books and records of the treasurer shall be audited at least once a year by a competent auditor employed by the council, and at such other times as the council may direct.

(c) The treasurer shall be required to give a surety bond satisfactory to the council and the Commissioner of Indian Affairs.

(d) The treasurer shall be present at all meetings of the council unless prevented by circumstances beyond his control.

(e) All checks shall be signed and all vouchers shall be approved for payment by two officers of the tribe as follows: the president or the vice-president, together with the treasurer or, in his absence, the secretary.

(f) In the absence of the president, vice-president, and
secretary, the treasurer shall carry on the duties of the
president.

Sec. 3. The tribal council may require all responsible tribal
officials and employees to be bonded. The premium for the bond
shall be paid by the tribe.

ARTICLE XXV - PART III - THE JUDICIARY
JUDICIAL POWERS

SECTION 1. The judicial powers of the Mescalero Apache Tribe
shall be vested in the tribal court, including a trial and appellate
court, which courts shall exercise jurisdiction in all criminal mat-
ters, except those matters within the exclusive jurisdiction of the
Federal and State Courts, wherein the defendants are members of
the Mescalero Apache Tribe or members of other Indian tribes
residing within the Mescalero Reservation: and may exercise jur-
isdiction in all civil matters wherein only members of the Mesca-
lero Apache Tribe are involved.

Sec. 2. The criminal offenses over which the Courts of the
Mescalero Apache Tribe have jurisdiction may be embodied in a
Code of Laws, adopted by ordinance of the tribal council, and sub-
ject to review by the Secretary of the Interior.

Sec. 3. The duties and procedures of the courts shall be de-
termined by ordinance of the tribal council.

ARTICLE XXVI - COMPOSITION OF THE TRIBAL COURTS

SECTION 1. The trial court shall consist of a chief judge and
two associate judges, appointed by the President of the Mescalero
Apache Tribe, with the concurrence of not less than a three-fourths
majority vote of the whole membership of the tribal council.

Sec. 2. The tribal council shall sit as a court of appeals when-
ever necessary and may hear appeals at any regular or special
meeting.

Sec. 3. The tenure and salary of tribal judges shall be estab-
lished by ordinance of the tribal council.

Sec. 4. No person shall be appointed to the office of tribal
judge unless he is an enrolled member of the Mescalero Apache
Tribe, not less than 35 years nor more than 70 years of age; nor
shall any person be appointed as a tribal judge who has ever been
convicted of a felony or, within one year, the last past, of a mis-
demeanor.

ARTICLE XXVII - INHERENT POWERS OF THE MESCALARO
APACHE TRIBE

SECTION 1. No provision of this constitution shall be construed
as a limitation on the inherent residual sovereign powers of the
Mescalero Apache Tribe. Any such powers, not delegated to the
representative tribal government by this constitution, are retained
for direct exercise by the people through referendum, as provided
for herein, or for exercise by the tribal government following
amendment of the constitution.

ARTICLE XXVIII - SAVING CLAUSE AND REPEAL
OF PREVIOUS CONSTITUTION

SECTION 1. The Constitution and Bylaws of the Apache Tribe
of the Mescalero Reservation, approved on March 25, 1936, under the provisions of Section 16 of the Act of June 18, 1934 (48 Stat. 984), as amended by the Act of June 15, 1935 (49 Stat. 378), is hereby repealed and superseded by this constitution.

Sec. 2. All ordinances and resolutions heretofore enacted by the Mescalero Tribal Business Committee shall remain in full force and effect to the extent that they are not inconsistent with this constitution.

Sec. 3. The incumbent tribal business committee and incumbent tribal officers shall remain in office and shall be entitled to exercise all powers granted by this constitution to the tribal council and tribal officers until such time as the first election of the tribal council and tribal officers is held under this constitution.

ARTICLE XXIX - OATH OF OFFICE

SECTION 1. No elective official of the Mescalero Apache Tribe shall be officially installed in the office to which such official is elected unless and until the following oath has been duly administered by a Judge of the Mescalero Apache Tribal Court:

"I, ................................................., do solemnly swear that I will support and defend the Constitution of the United States against all enemies; that I will faithfully and impartially carry out the duties of my office, uphold the Constitution of the Mescalero Apache Tribe, and represent the interests of the Mescalero Apache people. These things I will do to the best of my ability, so help me God."

ARTICLE XXX - RATIFICATION OF REVISED CONSTITUTION

SECTION 1. This constitution, when adopted by a majority vote of the qualified voters of the Mescalero Apache Tribe, voting at an election called for that purpose by the Secretary of the Interior, in which at least thirty percent (30%) of those entitled to vote shall cast their ballots, shall be submitted to the Secretary of the Interior for his approval, and shall be effective from the date of approval.

CERTIFICATION OF ADOPTION

Pursuant to an election authorized by the Secretary of the Interior on December 11, 1964, the attached Revised Constitution of the Apache Tribe of the Mescalero Reservation was submitted to the qualified voters of the tribe and was on December 18, 1964, duly adopted by a vote of 190 for and 103 against, in an election in which at least 30 percent of the 635 members entitled to vote cast their ballot in accordance with Section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat. 984), as amended by the Act of June 15, 1935 (49 Stat. 378).

KENNETH L. PAYTON
Chairman, Election Board
CHRISTIE LA PAZ
Election Board Member
ALTON PESO
Election Board Member
APPROVAL

I, John A. Carver, Jr., Under Secretary of the Interior of the United States of America, by virtue of the authority granted me by the Act of June 18, 1934 (48 Stat. 984), as amended, do hereby approve the attached Revised Constitution of the Apache Tribe of the Mescalero Reservation.

Approval recommended:
JAMES E. OFFICER
Associate Commissioner
Bureau of Indian Affairs

JOHN A. CARVER, JR.
Under Secretary of the Interior

WASHINGTON, D. C., January 12, 1965
ARTICLES OF ASSOCIATION
and
BY-LI'ES
of the
RESCALDO INDIAN CATTLE GROWERS' ASSOCIATION

Revised, Fall, 1945
Adopted by Members, July 1, 1946
Approved by Business Committee, July 13, 1946
Approved by Commissioner, July 17, 1946

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FREEDOM: The undersigned members, all of whom are residents of the Mescalero Indian Reservation and of the State of New Mexico and engaged in the production of livestock and livestock products do hereby voluntarily associate together, without capital stock, for the purpose of forming a non-profit cooperative livestock association.

ARTICLE I

NAME: Mescalero Indian Cattle Growers' Association.

ARTICLE II

LOCATION AND PRINCIPAL PLACE OF BUSINESS: Mescalero Indian Agency, Mescalero, N. Mex.

ARTICLE III

PURPOSES: (1) To promote the welfare and protect its members in the pursuit of the livestock industry in the Mescalero Indian Reservation.

(2) To encourage the raising of high grade livestock by using only purebred or registered bulls, bucks, rams, and stallions.

(3) To encourage all members to produce and save sufficient hay for winter needs of their stock.

(4) To encourage: (a) Proper use of all range on the Reservation; (b) The following of approved grazing practices; (c) The keeping of livestock numbers adjusted to the estimated carrying capacity of the range; (d) The developing and maintaining of stock-water and stock-watering facilities; and (e) The construction and maintenance of all other needed or constructed range improvements.

(5) To establish and follow well-organized salting plans.

(6) To obtain the highest possible prices for livestock and livestock products sold by having definite sale dates and selling all livestock and livestock products through the Association.

(7) To assist in and encourage the removal of surplus horses.

(8) To cooperate with other similar associations on the Mescalero Indian Reservation in creating central agencies for any of the purposes for which this association is formed, and to become a member of any such agencies now or hereafter formed.
ARTICLE IV

Powers: To acquire, hold and dispose of property; to borrow money and give liens on property of the association; to assign association income; to engage in any business in the legal pursuit of the purposes of the association; to charge membership fees and make special assessments; and such other powers as may be necessary to conduct the association's business.

ARTICLE V

MEMBER PARTICIPATION: The association shall operate on a cooperative basis. Each member in good standing shall be entitled to one vote and only one vote. There shall be no voting by proxy.

ARTICLE VI

MEMBER INTERESTS: The interest of the members, in good standing, in the assets of the association shall be equal. Members shall be liable for their proportionate share of the debts of the association.

ARTICLE VII

MANAGEMENT: A board of seven directors, elected in accordance with the By-laws, shall exercise the powers of the association and manage its business in accordance with its articles of association, by-laws and decisions of its membership meetings.

ARTICLE VIII

DISPOSITION OF NET SAVINGS: Reserve and operating funds shall be created as provided in the by-laws. Net savings may, in the discretion of the board of directors, be distributed to members in proportion to the amount of business done with each.

ARTICLE IX

EXISTENCE, AMENDMENTS, DISSOLUTION: These articles of association and by-laws shall not be effective until approved by the Business Committee of the Mescalero Apache Tribe and the Commissioner of Indian Affairs. Amendments may be made at any annual or special meeting of members called for the purpose, provided a quorum is present and provided two-thirds of the members in good standing present at such meeting approve the amendments. Any amendment shall not be effective until approved by the said Business Committee and the Commissioner. The association may be dissolved at any meeting of the members called for such purpose, provided that the same requirements as for amendments shall apply.

ARTICLE X

TRIBAL ORDINANCES: The association's activities shall be subject to ordinances of the Mescalero Apache Tribe pursuant to a Tribal Constitution and By-Laws which have been approved, chartered and ratified under the Indian Reorganization Act of June 15, 1934.
BY-LAWS
MESCALERO INDIAN CATTLE GROWERS' ASSOCIATION

SECTION I - MEMBERSHIP

(a) ELIGIBILITY: Any person who is a member of the Mescalero Apache Tribe and a resident of the Mescalero Indian Reservation, and who is engaged in or gives evidence of his intentions to engage in the production of livestock shall be eligible for membership, and may be admitted upon written application to the Board of Directors and acceptance of such application by a majority of the Board. Applicants shall be allowed nine months to demonstrate their good faith in participating in the activities of the association. All members shall be required to sign the articles of association and by-laws.

(b) EXPULSION: Members who violate any of the articles of association or by-laws, or fail to participate in the activities of the association, may be expelled from membership after an opportunity for a hearing before the board. A majority vote of the directors shall be required for expulsion. In lieu of expulsion the board may suspend the rights of a member until the next annual meeting of members, when the members may continue the suspension, request withdrawal or require expulsion. Expulsion or suspension shall not affect the indebtedness of the member with the association. Members who cease to produce cattle shall automatically lose their membership. The names of such members shall be reported by the secretary at the next meeting of the Board and recorded in its minutes.

(c) DECEASED MEMBERS: At the death of a member he shall automatically lose his membership. Death of a member shall not affect payment of his interests in net savings to his estate nor affect his indebtedness with the association.

(d) WITHDRAWAL: A member may withdraw by serving notice in writing to the board of directors providing he has ceased the production of cattle. Withdrawal shall not affect the indebtedness of such member with the association.

(e) RESTORATION: Expelled members or those who have withdrawn may be restored to membership by a majority of the board acting upon a written application of such ex-member, provided that those expelled by the members may be restored to membership only by the members at an annual meeting.

(f) GOOD STANDING: Members who have not been expelled, suspended or withdrawn and are not delinquent in the payment of membership fees or assessments shall be considered in good standing.

(g) PAYMENT OF INTERESTS: Members who are expelled or who withdraw and the estates of deceased members shall be entitled to their interests in the undistributed net savings as shown on the records of the association at the close of the association's last preceding fiscal year in accordance with Article VIII. Members who are expelled withdraw or die shall forfeit their interests in the reserve fund, operating capital and other assets of the association except net savings.
SECTION II - MEETINGS OF MEMBERS

(a) ANNUAL MEETINGS: Annual meeting of members shall be held at the Mescalero Indian Agency, Mescalero, New Mexico, beginning at 10:00 o'clock A. M. on the first Friday in February of each year. If not held on that day, it may be held at any time thereafter upon call by the president with notice as in (c) of this article.

(b) SPECIAL MEETINGS: Special meetings of members may be called at any time by the president upon resolution of the board of directors, or upon written petition to the president and signed by ten percent (10%) of the members in good standing. No business shall be transacted thereat except that specified in the notice.

(c) NOTICE OF MEETINGS: Members shall be notified of meetings by notices, posted at all reservation day schools, the Mescalero Post Office, the Mescalero Tribal Store, and the Mescalero Indian Agency Office, at least ten (10) days before the meeting, which shall state the time, place, and purpose. No failure or irregularity of notice of any annual meeting regularly held shall affect the proceedings thereat.

(d) QUORUM: Forty (40) members of the association in good standing.

(e) ORDER OF BUSINESS: Proof of notice of meeting
   Call to order and proof of quorum
   Reading and action on any unapproved minutes
   Reports of officers and committees
   Unfinished business
   Election of directors
   New business
   Adjournment

SECTION III - BOARD OF DIRECTORS

(a) NUMBER: The board shall consist of seven (7) directors.

(b) ELECTION AND TERM OF OFFICE: Directors shall be elected by secret ballot at the annual meeting of members. After 1946 the term of office shall be two years. For 1946 seven directors shall be elected, the four receiving the largest number of votes shall serve two years and the three receiving the smallest number of votes shall serve one year. Annually each year after 1946 the number of directors to be elected shall correspond to the number whose terms have expired. Directors shall hold office until their successors have been elected and qualified.

(c) QUORUM: A majority of the directors shall constitute a quorum at any meeting of the board.

(d) REMOVAL: Any director of the association may be removed from office for cause by vote of not less than two-thirds of the members in good standing at any regular meeting or any special meeting called for the purpose, at which a quorum of the members shall be present. The director shall be informed in writing of the charges preferred against him at least ten days before such meeting and at such meeting shall have an opportunity to present witnesses and be heard in person in answer thereto. Officers may be removed for cause by vote of two-thirds of the members of the board of directors.
(e) VACANCIES: Vacancies caused by removal, resignation or death of members of the board may be filled by the remaining members of the board or by members at the annual or special meeting called for that purpose. Vacancies shall be filled for the unexpired term only.

(f) COMPENSATION: Directors and officers of the association shall receive compensation for attendance at regular meetings and for other necessary meetings or occasions as the board may direct. The rate of compensation shall not exceed that paid by the Tribe to members of the tribal business committee for attending to similar tribal business. The rate of compensation for members of the Board for such services shall be determined by the association members. No director may be employed as a paid manager for the association.

(g) MEETINGS: The board of directors shall meet at least once every three months at the principal office of the association at a time to be set by the board. Special meetings of the board shall be held upon call of the president or upon written request of three members of the board.

(h) ELECTION OF OFFICERS: The board of directors shall meet within ten days after each annual election and shall elect by ballot a president, vice-president, secretary, and treasurer, or secretary-treasurer, who shall hold office until the election and qualification of their successors, unless earlier removed by death, resignation, or for cause. Except for the Secretary or Secretary-Treasurer, all officers shall be members of the board of directors. The Secretary of Secretary-Treasurer may or may not be a member of the Board.

SECTION IV - DUTIES AND POWERS OF BOARD OF DIRECTORS

(a) BOARD:

(1) GENERAL MANAGEMENT: The board of directors shall have general supervision and control of the business and affairs of the association and shall make all rules and regulations not inconsistent with law or with these by-laws for the management of the business and the guidance of the officers, employees, and agents of the association.

(2) HAVE ANNUAL AUDIT: After the end of the fiscal year and before the annual meeting the board shall make an annual audit or have such audit made of the accounts and records of the association and present the same to the members at the annual meeting. Such audits may be made by Indian Service employees or auditors, public auditors or by an auditing committee of three association members who are not directors.

(3) PREPARE ANNUAL BUDGET AND PLAN OF OPERATION: The board shall prepare an annual budget and plan of operation for the next year and present the same at the annual meeting for the consideration and action by the association members. After being acted upon at the annual meeting such budget and plan of operation shall be followed by the next board of directors.
EMPLOYMENT OF HELP: The board of directors shall have power to employ or to authorize in writing the employment of a manager and such employees as may be deemed necessary and to fix their compensation. While the association is indebted under any loan from the Tribe the manager shall be satisfactory to and his contract approved by the Business Committee of the Mescalero Apache Tribe and the Superintendent.

(b) DUTIES OF PRESIDENT: Preside over meetings; perform acts and other duties usually performed by a presiding officer; and sign such papers as authorized or directed by the board.

(c) DUTIES OF VICE-PRESIDENT: Perform the duties of the president in his absence or as authorized by the board.

(d) DUTIES OF SECRETARY: Keep a complete record of meetings; serve required notices; make reports; and perform such other duties as required by the board.

(e) DUTIES OF TREASURER: Perform such financial duties as may be prescribed by the board. The duties of treasurer may be combined with those of secretary.

(f) DUTIES OF NAMAGER: Shall be set forth in a written contract.

SECTION V - OPERATING CAPITAL AND FUNDS

(a) RESERVE FUND: Not less than fifteen percent (15%) of the total assessments made each year shall be set aside for the creation of a permanent endowment fund or capital until this fund equals $15,000.00. This reserve fund may not be distributed to members except in case of dissolution.

(b) NET SAVINGS: Sums accruing to the association treasury over and above the foregoing amount, whether through assessments or through transactions of the association, may be: (1) Used to reduce assessments or added to the reserve fund specified in part (a) of this section until the reserve fund equals at least $15,000.00; (2) Distributed among members of the association in good standing, on a patronage basis, provided that, the financial structure of the association is not impaired thereby, and, provided further, that no distribution of net savings shall be made to members unless net savings available equals $1,000.00 or more, except in case of dissolution; or (3) devoted at the discretion of the members of the association to any public purpose of the community.

(c) BONDS: Any officer or employee handling funds for the association shall be bonded in an amount satisfactory to the board, the cost of which may be paid by the association.

(d) ACCOUNTS AND AUDITS: Accounts and records shall be maintained in a manner satisfactory to the board, the Business Committee of the Apache Tribe of the Mescalero Reservation, and the Commissioner of Indian Affairs. An annual audit shall be made of the accounts and records of the association and presented to the members at the annual meeting. Audits shall be made in accordance with Section IV (b) (2).
(e) **DEPOSITORY**: Funds shall be deposited in an individual Indian account at the Mescalero Indian Agency, or in such other depository as may be approved by the Commissioner of Indian Affairs.

(f) **ANNUAL BUDGETS**: Annual budgets shall be made in accordance with Section IV(a)(3).

**SECTION VI - MISCELLANEOUS**

(a) **FISCAL YEAR**: The fiscal year shall be from January 1 to December 31.

(b) **PRINTING ARTICLES AND BY-LAWS**: After adoption and approval the Articles of Association and By-laws shall be mimeographed and a copy made available to each member, the Commissioner, Superintendent, Business Committee, and Supervisor of Extension work.

(c) **INSURANCE**: Shall include workman's compensation, and public liability and property damage covering claims due to accidents or injuries resulting from automobile, trucks and livestock.

(d) **AMENDMENTS**: May be made as provided for under Article IX of the Articles of Association.

(e) **AGREEMENT**: In signing the Articles of Association and By-laws each member agrees to market his livestock through the association and authorizes the Superintendent and the association to deduct from income from cattle sales sufficient funds to pay all assessments due the association for the care and handling of the cattle.

(f) **NON-MEMBERS**: Livestock for non-members of the association will be handled under written agreements, the form and conditions of which shall be satisfactory to the Superintendent; agreements shall provide for marketing the stock through the association with expenses and assessments to be deducted from the sales of cattle.

**CERTIFICATION**

This is to certify that at a general, special election held July 1, 1946, the foregoing amendments to the Articles of Association and By-laws were voted upon by the members of the association, in good standing, and were adopted as a result of 76 members voting for and 0 members voting against.

Signed: (s) Fred Pullman

Attent: President

(s) Asa Daklugie

Secretary

(g) **SIGNATURES**: The signatures and addresses of those accepting and agreeing to these Articles of Association and By-laws are:
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ARTICLES OF INCORPORATION
and
BY-LAWS
of the
MESQUALERO APACHE CATTLE GROWERS INCORPORATED

(Adopted February 28, 1954)
ARTICLES OF INCORPORATION
of the
MESCALERO APACHE CATTLE GROWERS, INCORPORATED

We, the undersigned, by authority of and pursuant to the laws and powers of the Mescalero Apache Tribe of the Mescalero Reservation, as set forth in its Constitution as approved, have this day voluntarily associated ourselves together for the purpose of forming a corporation and to that end do hereby adopt Articles of Incorporation as follows:

I. Name

The name of the proposed corporation is the Mescalero Apache Cattle Growers, Incorporated.

II. Location

The location of the principal office of the Corporation is Mescalero, County of Otero, State of New Mexico.

III. Purposes

The purposes for which this Corporation is formed is to breed, raise, import, export, and principally deal in cattle, horses and livestock and to carry on a general livestock and grazing business, purchasing or acquiring and selling or otherwise disposing, of the stock, feed, supplies, equipment, accessories, appurtenances, products and by-products of said business.

IV. Powers

The Corporation shall have the following powers:

1. To breed, raise, buy, sell and principally deal in cattle and horses.

2. To buy, raise and sell feeds necessary to the operations and purposes of the Corporation.

3. To buy, sell and otherwise acquire or dispose of supplies and equipment necessary or desirable to the operation and purposes of the Corporation.

4. To buy, lease, sell or otherwise acquire or dispose of real estate, water or interests therein, which is not tribally owned.

5. To declare and distribute dividends to its stockholders of record on dates to be fixed by the Corporation out of net earnings and surpluses of the Corporation without impairing the capital thereof.

6. To execute contracts and to borrow money and secure the payment thereof by liens or other charges on unrestricted property of the Corporation.
(7) To sue and be sued in courts of competent jurisdiction, provided that any judgment or lien shall not become an incumbrance on restricted property or tribal property.

(8) To adopt rules and regulations relating to the acquisition and sale of shares of stock of the Corporation.

(9) To have all other powers necessary or desirable to carry out the purposes for which this Corporation is organized. Not inconsistent with the Tribal Constitution and By-Laws and Charter.

V. Stock

The amount of the total authorized capital of the corporation is ______________ dollars. The total authorized capital stock of the Corporation is divided into ______________ shares of common stock, at ______________ dollars par value each. The amount of capital stock with which the corporation will commence business is ______________ shares having a par value of ______________ dollars.

Only the Apache Tribe of the Mescalero Reservation and its members, as determined by the Governing Body of the Tribe, shall be eligible to own shares in the Corporation, and no one member shall own more than ______________ shares, nor shall any member be permitted to continue ownership of fewer than ______________ shares. The Corporation shall have full and complete control over the issuance and transfer of shares of stock, and all transfers of shares must be first approved in writing and recorded on the books of the Corporation by the Corporation. The Corporation shall have the first right of purchase of all shares proposed for sale, and shall in all cases of transfer have full and complete authority to establish minimum value per share. Each shareholder, except minors, (minority to be determined by the Tribe) shall be entitled to only one vote without regard to the number of shares held by him.

VI. Board of Directors

The Board of Directors shall consist of seven (7) directors who shall be shareholders of the Corporation. These Directors shall exercise the powers of the Corporation and have full and complete authority to manage its business in accordance with these Articles and By-Laws.

VIII. Carrying Capacity - Regulations

No action shall be taken by or in behalf of the Corporation which in any way operated to destroy or injure the tribal grazing lands, timber, or other natural resources of the Mescalero Reservation. The use of tribal grazing or timber lands shall conform to the regulations of the Secretary of the Interior authorized by section 6 of the Act of June 18, 1934, with respect to range carrying capacity, and other matters therein specified.
VII. Amendments

Amendments to these Articles may be made at any annual meeting or special meeting called for that purpose, provided a quorum of votes is cast and two-thirds of those members voting approve the amendment. All such amendments must be approved by the governing body of the Apache Tribe of the Hescalero Reservation and of the Secretary of the Interior, or his authorized representative, when required.

IX. Term

The period limited for the duration of the Corporation is 10 years unless sooner dissolved by affirmative vote of two-thirds of the shareholders of record at a general meeting or special meeting called for that purpose.

X. Adoption of By-Laws

The incorporators shall be authorized to adopt By-Laws.

XI. Incorporators

The names and post office addresses of the incorporators and the number of shares subscribed for by each are as follows:
BY-LAWS OF THE MESCALERO APACHE CATTLE GROWERS, INCORPORATED

Section 1 - Meetings of Members

(a) Annual Meetings - Annual meetings of members shall be held at the Mescalero Indian Agency, Mescalero, New Mexico, beginning at 10:00 A.M. on the first Friday of February of each year. If not held on that date, it may be held at any time thereafter upon call by the President with notice as in (c) of this article.

(b) Special Meetings - Special meetings of members may be called at any time by the President upon resolution of the Board of Directors or upon written petition to the President and signed by 10 per cent of the members in good standing. No business shall be transacted thereat except that provided in the notice.

(c) Notice of Meetings - Members shall be notified of meetings by written notice properly stamped and posted at least 10 days before the meeting. Notices shall also be posted at the Mescalero Post Office, the Mescalero Tribal Store and the Mescalero Indian Agency Office at least 10 days before the meeting. All such notices shall state the time, place and purpose of the meeting.

(d) Quorum - Forty (40) members of the Corporation shall constitute a quorum for the conducting of all business except for the purposes of amending the Articles of Incorporation or these By-Laws.

Section 2 - Board of Directors

(a) Number - The Board shall consist of seven (7) Directors.

(b) Election and Term of Office - Directors shall be elected by secret ballot at the annual meeting of members. The term of office shall be three years. At the annual meeting for 1959, four Directors shall be elected. The two receiving the highest number of votes shall serve three years and the two receiving the next highest number of votes shall serve two years. Three Directors of the existing Mescalero Indian Cattle Growers Association shall be carried over and serve out the balance of their term of office. Annually, each year after 1959 the number of Directors to be elected shall correspond to the number whose terms have expired. Directors shall hold office until their successors have been elected and qualified.

(c) Quorum of the Board - A majority of the Directors shall constitute a quorum at any meeting of the Board.

(d) Removal - Any Director of the Corporation may be removed from the Board of Directors for cause by a majority vote of a quorum of the members of the Corporation at any regular meeting, or any special meeting called for that purpose. The Director shall be informed in writing of the charges against him at least 10 days before such meeting and at such meeting shall have an opportunity to present witnesses and be heard in person in answer thereto.
Vacancies - Vacancies caused by removal, resignation or death of members of the board may be filled by the remaining members of the Board or by members at the annual or special meeting called for that purpose. Vacancies shall be filled for the unexpired term only.

Compensation - Directors and officers of the Corporation shall receive compensation for attendance at regular meetings and for other necessary meetings or occasions as the Board may direct. The rate of compensation shall not exceed that paid by the Tribe to members of the Tribal Business Committee for attending to similar Tribal business. The rate of compensation for members of the Board for such services shall be determined by the Corporation members. No director may be employed as a paid manager for the Corporation.

Meetings - The Board of Directors shall meet at least once every month at the principal office of the Corporation at a time to be set by the Board. Special meetings of the Board shall be held upon call of the President or upon written request of three members of the Board.

Election of Officers - The Board of Directors shall meet within ten (10) days after each annual election and shall elect by ballot a President, Vice-President, Secretary and Treasurer, or Secretary-Treasurer, who shall hold office until the election and qualification of their successors, unless earlier removed by death, resignation, or for cause. All officers shall be members of the Board of Directors.

Section 3 - Duties & Powers of Board of Directors

(a) Board -

(1) General Management - The Board of Directors shall have general supervision and control of the business and affairs of the Corporation and shall make all rules and regulations not inconsistent with law or with these By-Laws for the management of the business and the guidance of the officers, employees, and agents of the Corporation.

(2) Annual Audit - After the end of the fiscal year and before the annual meeting the Board shall make an annual audit or have such audit made of the accounts and records of the Corporation and present the same to the members at the annual meeting. Such audits may be made by Indian Service employees or auditors, public auditors or by an auditing committee of three Corporation members who are not directors.

(3) Annual Budget and Plan of Operation - The Board shall prepare an annual budget and plan of operation for the next year and present the same at the annual meeting for the consideration and action by the Corporation members. After being acted upon at the annual meeting such budget and plan of operation shall be followed by the next Board of Directors.
(4) Employment of Help - The Board of Directors shall have power to employ or to authorize in writing the employment of a Manager and such employees as may be deemed necessary, and to fix their compensation.

(5) Duties of President - Preside over meetings, perform acts and other duties usually performed by a presiding officer, and sign such papers as authorized or directed by the Board.

(6) Duties of Vice-President - Perform the duties of the President in his absence or as authorized by the Board.

(7) Duties of Secretary - Keep a complete record of meetings, serve required notices, make reports and perform such other duties as assigned by the Board.

(8) Duties of Treasurer - Perform such financial duties as may be prescribed by the Board. The President and Treasurer shall furnish bond at the expense of the Corporation with such surety company and in such amounts as required by the Board; provided that such bond shall in no event be in an amount less than __________ dollars.

Section 4 - Stock, Operating Capital & Funds

(a) Stock or interests in stock inherited by non-members of the Mescalero Apache Tribe of the Mescalero Reservation shall be subject to immediate purchase by the Corporation at the appraised value by the Corporation.

(b) Upon the death of any member shareholder, stock owned by him shall be transferred only upon an order of an appropriate court having proper jurisdiction.

(c) Dividends are payable only to members of record in the stock books of the Corporation. To this end, for dividend purposes, the stock books shall be closed on a date to be set by the Board of Directors and dividends shall be paid only to those members of record on that date.

(d) A member shall be permitted to pledge dividends accruing from his shares of stock, provided that the instrument of pledge shall be required to be approved by the Board of Directors. No member shall be permitted to pledge his stock or interests in stock and any pledge thereof shall be void as against the Corporation. Dividends in the form of stock splits, or the increased issue of stock over and above that provided for in Article V of the Articles of Incorporation shall not be permitted without the approval of one-half of the stockholders of record.

(e) The Corporation shall establish a minimum reserve fund not exceeding the sum of __________ dollars. Dividends shall not be paid from this reserve fund.
Section 4 - Miscellaneous

(a) The fiscal year shall be from January 1 to December 31.

(b) Printing Articles and By-laws - After adoption and approval, the Articles of Incorporation and these By-laws shall be printed and a copy made available to each member.

(c) Insurance - The Board of Directors shall subscribe to policies of insurance providing for adequate coverage for workmen's compensation, public liability and property damage covering claims arising out of accidents or injuries resulting from the activities of the Corporation.

(d) Amendments - These By-laws may be amended at any annual meeting or special meeting called for that purpose, provided a quorum of votes is cast and 2/3 of those members voting approve the amendment.

CERTIFICATION

This is to certify that at a general, special election held February 20, 1939, the foregoing Articles of Incorporation and By-laws were voted upon by the members of the Association in good standing, and were adopted as a result of 36 members voting for and 16 members voting against.

[Signature]

Fred Pollman, President

Attest:

Virginia Klinkolt, Secretary

Rufus Sago, Treasurer
VITA

Martha L. Henderson was born in Duluth, Minnesota, April 17, 1952. She graduated from Crook County High School, Prineville, Oregon in 1970. She received the degree of Bachelor of Sciences with a major in social sciences from Western Oregon College of Education in 1974. A Masters of Arts in geography was earned at Indiana State University in 1978. Following the masters degree she worked for the U. S. Forest Service and various outdoor education programs. She has taught at the University of Southern Mississippi and New Mexico State University, and worked on research projects for Gulf South Research Institute and the U. S. Forest Service.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Martha L. Henderson

Major Field: Geography

Title of Dissertation: LANDSCAPE CHANGES ON THE MESCALERO APACHE RESERVATION: EASTERN APACHE ADAPTATION TO FEDERAL INDIAN POLICY

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]

Date of Examination:

July 27, 1988

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