IN THE LAND OF FROZEN FIRES

El Malpais

A HISTORY OF OCCUPATION
IN EL MALPAIS COUNTRY

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The Department also has major responsibility for American Indian reservation communities and for the people who live in island territories under U. S. administration.
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INTRODUCTION

On December 31, 1987, Public Law 100-225 established El Malpais National Monument and El Malpais National Conservation Area in the State of New Mexico. The Act set aside for the benefit and enjoyment of future generations nationally significant features, such as the Grants Lava Flow, Las Ventanas Chacoan Archeological Site, Perpetual Ice Caves, and other prominent natural and cultural resources.

The bill provides for 376,000 acres--262,000 as a national conservation area managed by the Bureau of Land Management and 114,000 acres as a national monument administered by the National Park Service. Legislation designates the Masau Trail, a vehicular tour route, linking El Malpais National Monument with other major sites of antiquity in New Mexico and Arizona.

El Malpais National Monument's boundaries include lands south of Interstate 40 near Grants, the Sandstone Bluffs area on the east side of the malpais adjacent to Highway 117, and Highways 53 and 109 flank the western boundary. The National Conservation Area extends out and circumvents national monument lands on all sides except north. Much of the National Conservation Area has been designated Wilderness Area.

As a new unit of the National Park Service, El Malpais National Monument is deficient in basic data necessary for planning requirements. This report will delineate the salient history of the region and identify historical themes and events associated with the monument and conservation area. The ultimate goal is to provide managers, interpreters, and resource personnel with background material on the region’s cultural history, to reflect human existence, interaction, and awareness and appreciation of this historically rich and beautiful land.

This study could not have been completed without the assistance of so many people. To Melody Webb, former Regional Historian for the Southwest Region, I owe a gratitude of thanks for having confidence in me that I could accomplish the project and for the helpful suggestions, reviews, and editorial critiques that greatly improved this manuscript. My associates in the Southwest Regional Office, I appreciate your comments and professional advise and support.

Few research endeavors can be completed without the support of archivists and librarians. I own a debt of gratitude to the following public libraries and their professional staffs: University of New Mexico in Albuquerque; New Mexico State University--Grants Campus; University of New Mexico--Gallup Campus; New Mexico State Records and Archive Center; Museum of New Mexico in Santa Fe; Mother Whiteside Memorial Library, Grants; and Arizona Historical Society, Tucson.

Obviously, an undertaking of this magnitude involves the cooperation of many others. I wish to express my sincere thanks to Doug Eury, Superintendent of El Malpais National Monument. Doug was extremely helpful in providing me with research materials on the development of the park. In addition, he supplied the names of local residents whom I interviewed. I am grateful to the employees of the Bureau of Land Management, Grants District. Steve Fischer was indispensable. Not only did he provide helpful information, Steve took timeout from his busy schedule to escort me to some of the historic sites in the area.
Last but not least, I wish to thank the following people who live and work in the Grants area. Without their assistance, this project could not have succeeded: David and Cora Candelaria, Wilber Thigpen, Ina Elkins, Bobby Elkins, Pierre and Irene Arrossa, Marshall Goodwin, Christine Adams, and Dovie and Lewis Bright. To all, I am deeply appreciative, and give my heartfelt thanks.
CHAPTER I

SETTING

Conquistadors dubbed it El Malpais meaning in Spanish "the bad country." And it was malpais—a mass of jagged, jumbled, coal-black rock. The early travelers tried to avoid it. Most roads simply skirted the lava flows. Trails, however, succeeded in slicing through them. Indians living in the area, Acomas and Zunis, forged a footpath through the malpais connecting the two pueblos and forming one of the oldest highways in the region. For the Spaniards, the malpais represented a formidable obstacle. Their horses could not negotiate the razor-like lava without lacerating hooves and fetlocks. The Spanish found it necessary to circumvent the malpais traveling either north via the Rio San Jose corridor or angling south, traversing the chain of extinct volcanoes on the west side of the lava flows.

To the Spaniards and later settlers, this geologic phenomenon seemed incongruous with the semi-arid landscape that dominates most of New Mexico. El Malpais forms part of the Colorado Plateau and core of the Mount Taylor volcanic region, one of the most significant volcanic areas in the United States. The western portion of the region falls within the elongated dome called the Zuni Uplift. The eastern half lies within the Acoma Embayment. Most of the volcanic features rest within this area.¹

Unequivocally, the most prominent features of El Malpais are the gnarled configurations formed by molten lava. Terminating at Grants, the primary lava deposits range southward for 40 miles. In width they fluctuate from 5-15 miles. These flows consist of four distinct basalt flows. Basalt is simply a form of solidified lava. Of the four flows the Zuni Canyon flow is the smallest. Its total area probably does not exceed six square miles. Its source is the Zuni Mountains, which flank the western border of the park. The Zuni Canyon flow originates from two separate points. Scientists claim the Zuni Canyon flow was a slow-moving river of fire. Its course was north, down the narrow corridor of Zuni Canyon until its juncture with the San Jose Valley near the present town of Milan. None of the Zuni flow falls within the boundary of the preserve.²

The Laguna and McCartys flows are within El Malpais National Monument and National Conservation Area boundary. The Laguna is the larger and the older of the two and, like the Zuni Canyon flow, tends to be characterized as "slightly eroded, grey-tinted lavas with a thin veneer of soil cover."³ In actuality the Laguna is a complex of many flow units including the Bandera, Twin Craters-Lava Crater-Cerro Candelaria-Lost Woman flows, El Calderon, Hoya de Cibola, and Cerro Redija flows. The Laguna deposits blanket most of the San Jose valley between State Highways 117 and 53. The origin of the Laguna flow are approximately 40 miles south. A distinguishing trademark of the Laguna flows is the plethora and variety of lava formations that geologists have appropriately named as spatter cones, pahoehoe flows, and AA


flows. Also featured in the Laguna flows is outstanding examples of volcanic activities—lava tubes, cinder cone of classic symmetry, and a score of ice caves.\footnote{Ibid., p. 1.}

The McCartys flow spewed in the same general vicinity as the Laguna. Its course tracked northward paralleling the eastern edge of the Laguna flow. The McCartys flow consist of a thin narrow band of jet black lava, described by one geologist "as fresh and unweathered as the historic flows of the Hawaiian Islands."\footnote{Ibid., p. 5.} The McCartys flow represents the most recent volcanic activity. Archeological evidence suggest the eruption occurred as recent as 500 years ago, certainly not much more than 1,000 years ago.\footnote{Ibid.} Acoma Indians in recounting their traditional stories relate that lava flows inundated cultivated fields of their ancestors. If so, this would identify the McCartys flow as occurring between 700 A.D. and 1540. Upon reaching the Rio San Jose valley, McCartys's liquid fire veered east ultimately terminating about five miles downstream at the hamlet of McCarty's.\footnote{James. "Rivers of Fire." 46. 4.}

Another flow, the Bluewater, terminates approximately five miles northwest of Grants. It is probably the oldest of the four flows being in the neighborhood of a million years old. The Bluewater erupted from near Haystack Butte flowing in a general southeastwardly manner along the Rio San Jose bottom. None of the Bluewater flow lies within the monument boundary. Equally impressive are the numerous volcanic cinder cones associated with earlier flows. Without question, Bandera Crater is the most imposing. Flanked by ten or more lesser cones, Bandera sports a diameter of 1800 feet. The depth of the crater is 700 feet. Two other natural landmarks, El Calderon and Twin Craters, are nearby.\footnote{National Park Service. A Study of Alternatives: El Malpais. pp. 11-14.}

Numerous ice caves punctuate the Laguna flow. The largest, a commercially operated venture, is adjacent to Highway 53 approximately 25 miles south of Grants. Without official name this ice cave is sometimes referred to as Perpetual Ice Cave or Zuni Ice Cave. Water is the substance of all life. In most sections of the Southwest it is a precious commodity often in short supply. It is essential to El Malpais. Annual precipitation in the region averages 10 inches. Moisture from localized thunderstorms is most prevalent in the summer months. Surprisingly, the lava beds retain rainfall better than the arid land surrounding them because of the porous quality of the lava rock. Water permeates the lava and is trapped beneath the basalt. In addition, the lava acts as an insulating agent reducing evaporation. Instead, some of the moisture cools and becomes crystalline ice.\footnote{Allen A. Carter. "Perpetual Ice Caves," October 23, 1936. Works Progress Administration. File 34. Archives of New Mexico-State Records Center & Archives, Santa Fe, New Mexico.}

Evidence of human activity in El Malpais is ubiquitous. From archeological evidence the region's first dwellers appeared in the area during the Paleo-Indian Period (10,000-5,500 B.C.). These earliest inhabitants subsisted chiefly from hunting game. About all that remains of their occupation are the stone and bone tools they left behind. During the Archaic Period (5,500 B.C.-400 A.D.), El Malpais's residents exhibited a growing dependence on agriculture. Indians
began to utilize the surrounding mesa tops and valleys for seasonal periods. They occupied shelters beneath the overhangs of Ceboleta Mesa, which dominates the eastern edge of the lava flow.\(^\text{10}\)

The Anasazi (A.D. 400-1600) represents the transformation of Indians from hunters-food gatherers to a Puebloan peoples, who were chiefly farmers. With an economy centered around agriculture, the Anasazi created stationary villages and established permanent architecture. The process evolved slowly. Cave shelters were supplanted with jacal and pithouses beginning about 800 A.D. During the Ceboleta Phase (A.D. 950-1000), Indian presence intensified above canyon mouths, while declining on mesa tops. The Kowina Phase (A.D. 1200-1400) produced a period of significant cultural modifications. Population shifts increased from numerous small units to centralized locations. Indians returned to the mesa tops. Kowina Ruins, situated on Ceboleta Mesa, is an excellent example of pre-Pueblo lifestyle. Kowina contains more than 300 rooms.\(^\text{11}\)

Toward the end of the thirteenth century, widespread drought impacted the inhabitants living on the mesas. Demographics point to the abandonment of the mesa tops in favor of living along the valleys, such as the Rio San Jose to the north and the Rios Puerco and Grande to the east. This exodus did not occur overnight but had been accomplished by the end of the next century. At the outset of the 1400s, the Kowina Phase had disappeared altogether. Indians now lived in fewer but larger towns or pueblos. Typical of this process is Acoma Pueblo.\(^\text{12}\)

Coronado's expedition into New Mexico officially propelled the first Americans from a state of prehistory into the historic period. Spaniards found the Indians living communal-style in pueblos with an economy based on agriculture. Two major Indian tribes flanked the malpais. The powerful Zunis resided on the western slopes of the Zuni Mountains. Acoma Pueblo lay east of the Zuni Tribe with the lava beds separating the two pueblos.

Beginning with the first European contact with New Mexico's Indians, the trademark of the succeeding Spanish, Mexican, and American cultures in dealing with the Indians was to subjugate them. Deploying technological and military dominance, the European-based cultures eventually subdued and pacified the original inhabitants of the Southwest. From prehistory to the present, however, the rugged topography of the malpais has dominated Indian, Spanish, and American activities. Nearly 40 miles long, El Malpais formed a nearly implacable obstruction to east-west travelers, or to all those who endeavored to penetrate it as a short cut to gain access to more inviting territory. Despite the cultural differences common threads link, dominate, and dictate living patterns in El Malpais. Climatic conditions, vegetative covering, boom-and-bust cycle of the mining, timber, and railroad industries have all influenced and molded the interaction of the Indian, the Hispanic, and European-American.

\(^\text{10}\)Tainter and Gallio, \textit{Cultural Resources Overview}, p. 57.

\(^\text{11}\)Ibid., pp. 60-61.

\(^\text{12}\)Ibid., p. 63.
CHAPTER II

GLORY, GOD, AND GOLD: THE CONQUEST OF NEW MEXICO

When Francisco Vásquez de Coronado's expedition entered the present United States border in 1540, it constituted the first intensive exploration of what is now the Southwest United States. Coronado's trek through the deserts of Arizona and New Mexico was designed and patterned after similar Spanish conquests in Central and South America. Indeed, for the previous 40 years a procession of Spanish conquistadors had been searching for wealth, fame, and adventure. In rapid succession Spain conquered vast chunks of real estate in the Americas. The Aztecs fell to Hernan Cortes in 1521; Francisco de Pizarro devastated the Incas of Peru in 1532; Mexico was subjugated and in the process, Spain planted in 1535, the first permanent vice royalty in America. Political power was invested in the viceroy and a judicial tribunal, the Audencia. Because of the behemoth size of Spain's New World holdings, it became an administrative necessity to divide the kingdom into smaller more manageable regions. Mexico City became the seat of Spain's occupied provinces. To the north lay an unexplored empire and potentially as lucrative as the wealth found in Peru and Mexico. Exploration into the northern provinces followed without delay.

Spanish expansionism used dual paths. One path pursued an unrelenting push for exploitation and diversion of Indian wealth into the coffers of Spain. The other route championed Spain's desire to expand Christianity by converting the demonic souls of its new-found subjects to Catholicism. For the first two decades of the sixteenth century, Spain principally engaged the Aztec and Inca Empires. In quick succession it extracted huge deposits of mineral wealth from its victims and began the process of rescuing the souls of the natives. By the third decade, Spanish attention turned northward, beyond Mexico, to the pervasive rumors of treasures in North America.

The Spanish crown nodded in acquiescent to a series of land and sea campaigns, some of which failed disastrously. One expedition commanded by Panfilo de Narvaez set sail from Cuba in the spring of 1528 bound for Florida. Coming to shore near present-day Tampa, the command wandered in search of the rumored wealthy kingdom of Apalachee. They found nothing but trouble. The Indians were unfriendly and poor. Moreover, Navarez's supply ships, which intended to rendezvous with him up the Florida coast returned to Cuba. Disillusioned and fatigued by their ordeal, the commander aborted the mission. The expeditioners decided to seek refuge in Mexico, and they constructed makeshift boats fashioned from the skins of their horses to transport them. Setting a westerly course across the Gulf of Mexico, disaster struck when the ships foundered in a storm. The survivors came to shore on or near Galveston Island in November 1528. A combination of disease, exposure, and Indians attacks whittled the approximately 100 survivors down to four. Alvar Nunez Cabeza de Vaca, Andres Dorantes, Alonso del Castillo Maldonado, and Dorantes's Moorish slave, Estevanico, eventually banded together. They began an overland odyssey punctuated by seven long years of living off the land and from handouts of local Indians. In the summer of 1535, Cabeza de Vaca and his motley entourage waded the Rio Grande near the confluence of that river with the Rio

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Conchos (near Presidio, Texas). Plodding westward, they crossed the backbone of the Sierra Madres where by happenstance they bumped into Spanish military.  

The quartet appeared before Nuno de Guzman, provincial governor of Nueva Galicia. Later de Vaca's group visited Mexico City, where they had an interview with Viceroy of New Spain, Antonio de Mendoza. Mendoza listened as de Vaca related how they had acquired "undeniable indications of gold, antimony, iron, and copper, and other metals." Cabeza de Vaca's epic journey spawned lurid stories of immense riches said to be located in Texas and New Mexico. Moreover, de Vaca's report confirmed the presence of a large land mass between Florida and Mexico, provided knowledge about Indians and Indian trails in the region, and led directly to the missionary work of the Southwest.  

Spanish authorities reacted cautiously to the gilded report. Two years elapsed before a pair of priests, Fathers Fray Juan de la Asuncion and Fray Pedro Nadal, undertook a reconnaissance to locate the Seven Cities of Cibola. The priests may have traveled as far north as the Gila River in Arizona before turning back. The next year Mexico's viceroy commissioned Fray Marcos de Niza to reconnoiter the northern territory. The appointment of Fray Marcos to search for the Seven Cities was based on Marcos's credentials as a navigator, his experiences in dealing with Indians, and his work as a cosmographer. Marcos assembled his diminutive command at Culiacan, located on the Pacific coast of Mexico. The exploratory group included laybrother, Fray Honorato, a few Indians, and Estevanico, the black slave who accompanied Cabeza de Vaca on his eight-year wanderings. Relations between Estevanico and Fray Marcos deteriorated. Estevanico's flamboyant demeanor (he adorned himself with brilliant feathers, plumes, and bells) and his confident attitude of superiority clashed with the pious, dull Marcos. When Estevanico added a cortege of Indian females to his camp, Marcos retaliated by sending the black forward, to examine the land and to keep him apprised of what he discovered.

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9 Holland. *Hawkuh.* 7-8: Little is known of Estevanico, although his exploits are covered in many of the Cabeza de Vaca sources. John U. Terrell. *Estevanico the Black* (Los Angeles: Westernlore Press. 1968) produced a biography on the subject, however, judging from the padding and conjectural information, it hardly qualifies under the definition of a book.
In order to maintain communications with Estevanico, Fray Marcos deployed a system based on the crucifix. Should Estevanico possess good news he was to send an Indian back to Marcos with a cross the size of a man's palm. If the discovery of a rich province occurred, a runner would return to the friar with a crucifix twice the size of a palm, and if the discovery rivaled New Spain, a larger cross. Imagine the expression on Fray Marcos's face when an Indian courier shortly appeared carrying a cross "as high as a man." The Indian runner declared that Estevanico wanted Fray Marcos to hurry forward, that Estevanico had encountered Indians who had visited a province and a city called Cibola, and it was "the greatest province in the world."  

Marcos hurried on, following the black's path. More crosses, more Indians, foretold of an immense and wealthy province. When Marcos ranged within two or three days of the province, he encountered an Indian who possessed "the deepest sadness in his whole person." The Franciscan was horrified to learn that truculent Zunis had killed Estevanico and sent the remainder of his fact-finding expedition fleeing for their lives. According to Fray Marcos, he continued his journey with intentions of gaining a glimpse of Cibola's beauty and magnitude. From a hill overlooking Cibola Fray Marcos paused to view the city. Fray Marcos recorded that "The town is bigger than the city of Mexico." According to Marcos's account, he wanted to visit the city "because I knew that I risked nothing but my life, which I had offered to God the day I commenced the journey." He convinced himself, however, that this irrational course would deny everybody in Mexico information on his revelation. Leaving a pile of stones affixed with a small cross to claim the land for Spain, Marcos quickly retraced his steps and returned to Mexico. 

In Mexico City Fray Marcos presented a glowing report of his trip claiming he had found the fabled Seven Cities of Cibola, probably an Indian term for the Zuni pueblos. Fray Marcos's account stirred the imagination of the people of Mexico, for he characterized the city of Cibola as "larger than the city of Mexico . . . the doorways to the houses have many decorations of turquoises, of which there is great abundance." One Indian witness, the friar recounted, said Cibola is "a land rich in gold, silver, and other wealth, and has great cities." 

Considerable debate has surfaced over whether Fray Marcos actually glimpsed Cibola. The current thought that washes up indicates he had found the Zuni province. One historian-geographer, Carl O. Sauer, maintains Marcos traveled only as far as southern Arizona, 

11Holland. Hawikuh, 8. 
15Ibid., 22; George P. Hammond and Agapito Rey. Narratives of the Coronado Expedition. 2: 66-79. 
16Bolton. Coronado. 50.
that his report was doctored for use by Mendoza to parry any claims by Mendoza's rival Hernan Cortez. Fray Marcos has his supporters too, among them Adolph Bandelier and Herbert Bolton, so the debate is likely to never end.\(^\text{17}\)

Fray Marcos's stories, widely circulated in Mexico, were embellished with each accounting. "The country was so stirred up by the news which the friar had brought from the Seven Cities that nothing else was thought about," reported one Spaniard. So pervasive was the rumor of wealth in the northern territory, that Viceroy Mendoza encountered no problems in finding recruits for an expedition into Cibola. The lucky man to head just such an enterprise was Mendoza's good friend and compatriot, Francisco Vásquez de Coronado, newly appointed governor of Nueva Galicia (Guadalajara, Mexico). Coronado like many other Spaniards of his day became addicted to the boundless opportunities offered in the New World. He entered Mexico in 1535, casting his fortunes with Viceroy Antonio de Mendoza.

Coronado represented all that Spain could boast in a cavalier: loyal to the throne, brave beyond a doubt, wealthy, light-complexioned, and fair-headed. A gutty crew of 300 Spaniards and 800 Indian allies comprised the ranks. Fray Marcos served as guide. Captain-General Coronado departed from his base at Culiacan, on the west coast of Mexico in the middle of April 1540. Coronado's course took him northward into present-day Arizona. On July 7, scouts informed Coronado he was approaching Cibola, probably at the Zuni village of Hawikuh. The inhabitants of Zuni had been warned of the impending menace and prepared to give the Spaniards a proper welcoming. When the Zunis refused to submit to peaceful overtures, the battle-cry "Santiago" signalled the Spanish attack.

Indians shot arrows and hurled rocks at their adversary but to little avail. Within an hour Coronado drove the Zunis inside their walled fort. Wasting little time, the Spaniards catapulted over the walls, drove the Indians from their shelters, and took possession of Cibola.\(^\text{18}\) The Battle of Hawikuh (named for one of the six pueblos that comprised the Zuni settlement) was over. The victory was barren. Cibola represented no Incan Empire. No gold-filled rooms or pendants studded with silver greeted the conquerors. Instead, the Spaniards discovered squalid adobe and stone structures reminiscent of the small villages in Mexico. Nonetheless, Coronado remained indefinitely at Zuni to rest and reconnoiter the countryside and the surrounding pueblos.

Meanwhile, the soldiers who had accompanied Coronado vented their anger at Fray Marcos, for it had been Marcos's exaggerated report that prompted many of the Spaniards to enlist in the expedition. Writing to Viceroy Mendoza from Zuni, Coronado acknowledged concern over the safety of the friar reporting, "such were the curses that some hurled at Fray Marcos that I pray God may protect him from them." Coronado, too, felt betrayed by Fray Marcos writing in the same letter that, 'It now remains for me to tell about this city and kingdom and province, of which the Father Provincial [Fray Marcos] gave your Lordship an account. In brief, I can

\(^{17}\) For a treatment on whether Fray Marcos viewed Zuni or not, see Bandelier. The Discovery of New Mexico. 27-39; also Holland, Hawikuh. 14-15: The arguments against Fray Marcos going to Zuni are contained in Carl O. Sauer. "The Credibility of the Fray Marcos Account." New Mexico Historical Review 16 (April 1941): Carl O. Sauer. Road to Cibola (Berkley: University of California, 1932); Cleve Hallenbeck. The Journey of Fray Marcos de Niza (Dallas. 1949); and Henry R. Wagner. "Fray Marcos de Niza." New Mexico Historical Review 9 (April 1934): Supporters of Fray Marcos going to Zuni include the works of Bancroft. Bandelier, and Bolton: also George J. Undreiner. "Fray Marcos de Niza and His Journey to Cibola." The Americas 3 (April 1947).

assure you that in reality he has not told the truth in a single thing that he said, but everything is the reverse of what he said, except the name of the city and the large stone houses.\textsuperscript{19} The reality of Cibola shattered Fray Marcos' reputation. Now an outcast among friends, he returned to Mexico at the first opportunity. Despite the spurious reporting of Fray Marcos de Niza, he ranks as a primary figure in Spanish conquest. His journey opened the doors for future Spanish explorations in hitherto uncharted lands.\textsuperscript{20}

Rumors of strange bearded men sitting atop huge snorting beasts bedecked in brilliant ornate habiliments had been circulating wildly among the pueblos of New Mexico. The pervasive question asked by every Indian was, who were these omnipotent people who wrought havoc and destruction to everything they touched. And what kind of mystical powers did they possess, so deadly that they destroyed their enemies by merely aiming a magic stick?

From the pueblo of Cicuye (Pecos), 200 miles east of Zuni, an emissary of Indians departed for Zuni on an errand of peace and curiosity. A portion of their journey followed the Zuni-Cibola Trail, the pathway connecting the pueblos along the Rio Grande with the outposts of Acoma, Zuni, and Hopi.\textsuperscript{21} This footpath dissected the malpais 13 miles west of Acoma Pueblo. Upon reaching Zuni, Bigotes, the chief spokesman from the Cicuye delegation met Coronado. Coronado probably still carried evidence of facial bruises received when he was pummelled in the face with stones during the battle for Hawikuh. Bigotes was tall but robust in appearance. The Spaniards gave Bigotes his sobriquet from the long mustached that embraced his face. He informed Coronado "they had come to serve him. . . .and that if the Spaniards planned to go to his land they would be welcomed." Bigotes exchanged gifts with the Spaniards, presenting them buffalo robes, shields, and headdresses. Coronado reciprocated with artificial pearls, glass vessels, and little bells. Coronado accepted Bigotes' invitation to visit Cicuye, no doubt hoping that it might be his Cibola. He ordered Captain of Artillery, Hernan de Alvarado, to take a squad of 20 men and visit Cicuye and report back to the captain-general within 80 days. On August 29, 1540, Alvarado bade farewell to Coronado and the Zuni encampment.\textsuperscript{22}

Although Alvarado's precise route cannot be determined, his journey certainly threaded segments of the malpais. He was probably the first non-Indian to cast eyes on the malpais country. Although there is no mentioning of it in any of the Spanish chronicles, nor did they incise their names into its sandstone facing, the little cortege of Spanish and Pecos Indians probably passed El Morro en route to Pecos.\textsuperscript{23} Beyond El Morro they skirted portions of modern-day State Highway 53 before dropping south of the main Acoma-Zuni Trail. Because the horses could not negotiate the rough lava terrain of the malpais, Alvarado's command did not cross the malpais. Alvarado's trajectory carried him south of the malpais into the extinct

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volcano region west and south of the malpais. Swinging east, the Spaniards crossed the southern extremity of the malpais to reach Acoma Pueblo, September 4.24

Alvarado’s squad viewed the “Sky City” of Acoma, perched on a rocky monolith twice as high as the Giralda of Sevilla. Ascent could only be accomplished by negotiating a narrow stone staircase that terminated into “mere holes for the hands and feet.” Initially, the Acomas exhibited hostility towards Alvarado, but relented when the Spaniards prepared for combat. The Spanish described the Acomas as being closely related to the Zunis in dress and culture. Alvarado did not linger at Acoma. Before he departed the Acomas presented his command with copious amounts of maize, beans, and turkeys.25 Outfitted with provisions, Bigotes led the foreigners eastward. On September 7, eve of the Nativity of the Blessed Virgin, the cavalcade reached the Rio Grande Valley. The Spaniards christened the river, Neustra Señora, because of its discovery on the eve of the Nativity of the Blessed Virgin. Alvarado advanced northward, up the valley, and entered the province of Tiguex near present-day Bernallilo. Impressed with this extensive province, its large population, and its abundant food supplies, Alvarado sent word back to Coronado, recommending the town for winter quarters. Alvarado proceeded to Cicuye apparently reaching the pueblo after detouring to Taos.26

Meanwhile, Coronado organized the balance of his army at Zuni into three detachments for the movement to join Alvarado at Tiguex. In late November or early December, Coronado departed Zuni with his small force, consisting of 30 men. Like Alvarado’s route, Coronado’s path cannot be precisely measured. However, given the facts that Coronado reached the Rio Grande Valley near the vicinity of Socorro and that he did not visit Acoma Pueblo, it seems likely that he detoured farther south than his artillery captain. His course carried him south of Cebolleta Mesa probably through lands now set aside as the National Conservation Area. The column entered the Rio Grande Valley near Socorro. Tristan Arellano, who had commanded the main army from the outset of the expedition, followed the trail of Alvarado. Of the fourth division of Coronado’s army under Lopez de Cardenas, nothing is known of his course. It is believed that Cardenas pursed the path of Alvarado and Arellano. At least three of the four groups passed El Morro or in proximity to it. All four columns experienced portions of the lava flows.

In April 1542 Coronado passed the lava flows again, this time on his return trip to Culiacan. He was not the same haughty, energetic Spaniard who had triumphantly trudged through the region two years before. The fire of conquest and vision of riches had vanished from his eyes. Disillusionment and poor health characterized his countenance. Two years of wandering over the Southwest and portions of the Midwest had sapped his ardor. Moreover, the failure to discover precious metals stamped him a failure by his peers.

24Bolton, Coronado, p. 182-183: Considerable debate waxes over the route taken after departing Zuni and it may never be determined to the mutual satisfaction of all concerned. Based on the writings of Fray Juan de Padilla, who accompanied Alvarado, the Spanish column reached intersecting roads approximately 15 miles east of Hawikuh. Padilla recorded, “two roads branched out here, one to Chia [Zia], the other to Coco [Acoma]. We followed the latter.” From Padilla’s account it would appear that Alvarado approached Acoma from the southwest. See Chavez. Coronado’s Friars, 50-51: However, it is possible that Alvarado’s column reached Acoma Pueblo via the Rio San Jose Valley. See map in Bancroft, History of Arizona and New Mexico, 54, which suggests Alvarado descended the Rio San Jose and Coronado traveled south of the malpais missing Acoma altogether.

25Bancroft, A History of Arizona and New Mexico, 50. Another Spaniard reported the Acomas were friendly, offering the Spanish “cotton cloth, skins of buffalo and deer, turquoises, turkeys, and some of their other kinds of food.” See Bolton, Coronado, 183.

Although Coronado's expedition failed to reap fabulous riches from the region, it did succeed in providing the first detailed information about Spain's northernmost province. Viewed and interpreted in today's context, Coronado's sojourn into New Mexico is significant for its wealth of information concerning the area and its first inhabitants. Although most of the routes traversed are based on conjecture, El Malpais region figured prominently in Spanish movements. Unfortunately, Spanish authorities were not interested in acquiring descriptive accounts of squalid Indian pueblos. Coronado's lackluster performance went unnoticed as Spaniards turned their attention to Indian revolts in Mexico.

It would be 40 years before Spain again attempted to explore New Mexico. In the summer of 1581, Frayles Agustin Rodriguez, Francisco Lopez, Juan de Santa Maria, and Captain Francisco Chamuscado, with 8 soldiers and 19 Indians servants initiated an exploratory expedition into New Mexico. Ostensibly, their mission served to convert Indians to Catholicism but also to develop silver and gold mining interest. Starting from Chihuahua, the cavalcade trekked northward down the Rio Conchos to present-day Presidio, Texas. Reaching that point, the Spaniards turned northward following the Rio Grande. They visited the pueblos of Tiguex and Pecos, the same seen by Coronado 40 years earlier. Angling west the entourage halted at the pueblos of Jemez and Acoma. Moving west, they passed the malpais en route to Zuni. The expedition proved disastrous. One of the priest was murdered. Two other priests ventured out alone, giving rise to speculation that Indians had martyred them. To make matters worse, Captain Chamuscado took ill and died before the expedition returned to Mexico, April 15, 1582.

The Rodriguez expedition was not in vain for it spurred Spanish authorities to attempt to rescue the two priests. Antonio de Espejo organized a relief party. On November 10, 1582, Espejo and crew departed San Bartolome. Retracing Rodriguez's footsteps, Espejo ascertained at the pueblo of Puara, part of the Tiguex complex, that the two friars had been slain. Before returning to Mexico the expedition explored the region. Writing in his journal, Diego Perez de Luxan recorded the first official penetration of El Malpais. Luxan wrote: "March 7, to Acomita; March 8, another four leagues past a marsh [probably McCartys]; March 9, another 4 leagues in waterless malpais; March 10, 7 leagues, pine forest waterless mountain; March 11, three leagues, stopped at a water hole at the foot of a rock." The reference to the "waterless malpais" represented the first historic notation of the lava beds.

The explorations of Rodriguez and Espejo reawakened Spain's interest in New Mexico. With renewed vigor Spain traveled a path devoted to expansionism and missionary work in New Mexico. An abortive and illegal endeavor to colonize New Mexico in 1590 and again 1594 went astray. Spurred by illegal colonization efforts, Spain in 1595, granted permission for a permanent settlement. Don Juan de Onate with a colony of 130 families, 270 unattached men, and 7000 head of livestock comprised the enterprise. Northward, they plodded to El Paso establishing the Chihuahua Trail that acted as an umbilical cord between Mexico and the northern frontier of New Mexico.

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28 Bancroft, History of Arizona and New Mexico. 75-78.

29 Luxan's journal also records the first historical documentation for visiting El Morro. See Reed, "Spanish Expeditions and El Morro Inscriptions." 8.
Onate established the first colony in New Mexico at San Juan Pueblo (Chamita, New Mexico). Onate quickly explored his domain and announced to the Indian populace that they were now subject to the laws and dictates of the Spanish crown. Zutacapan, an Acoma warrior, heard of Onate's proclamation and hurriedly returned to the mesa top to incite his tribe to resist Spanish authority. Over council fires the elders debated their course of action. Should it be war or peace? Support for peace came from an unlikely source, Zutacapan's son, Zutancalpo. When the venerable statesmen, Chumpo interceded on behalf of the peace advocates, the Acomas sided with Zutancalpo.

On October 27, 1598, Onate arrived at Acoma as part of a goodwill tour with exploration plans to reach the Pacific Ocean. From an accommodating host, the Spaniards received an abundance of provisions. When invited by the hospitable Zutacapan to enter the pitch-black ceremonial kiva, Onate declined, fearing entrapment. Onate departed the pueblo and took his entourage to Zuni skirting the usual Zuni-Acoma highway leading through the malpais via modern-day Grants and San Rafael. Reaching Hawikuh, Onate rested to await the concentration of his command still stationed at San Juan.

Meanwhile emotions reached the boiling point at Acoma. Spanish captain, Gaspar Villagra, on a mission to round up deserters, was ambushed near the Acoma citadel. The Acomas accomplished the killing of Villagra's mount but nothing else. Alone and on foot, Villagra traveled westward towards Zuni. A sudden snowstorm in the malpais impeded his progress. An exhausted Villagra, suffering from exposure, managed to reach El Morro. Three Spanish soldiers searching for loose livestock found his half-frozen body and transported him safely to Hawikuh.

Onate's nephew, Juan de Zaldivar, with 30 soldiers departed San Juan in late November to join his uncle. Zaldivar approached the Acoma pueblo on December 1 and pitched camp at the base of the Acoma citadel. Conferring with the Acomas under Zutacapan, the Spaniards made it known that they desired fresh provisions. Having just supplied Onate's party barely a month before, the Acomas reacted less than favorably to the request. Nevertheless, the Acomas consented to the demand but requested a few days to gather the food and prepare the corn. On December 4, Zaldivar and half his command ascended the "Sky City" to receive the offerings. Without warning the Acomas pounced on the scattered column. Recounting of traditional Acoma oral histories infer that some of the soldiers attacked their woman, precipitating the fight. Spanish documents, however, are mute on the issue.

In the initial outburst, Zaldivar fell, clubbed to death. Overall 14 soldiers were slain. Five Spaniards leaped from the cliff--one died in the plunge, but the other four escaped. They joined the stunned soldiers camped on the valley floor. The excited Spanish scattered, some joining Onate to inform him of the disaster. The remainder returned to San Juan to warn the remaining colonists of the trouble.


31 Bancroft. History of Arizona and New Mexico. 140.

32 Garcia-Mason, "Acoma Pueblo," 457; Jack D. Forbes. Apache, Navaho, and Spaniard (Norman: University of Oklahoma Press, 1960), 87-88 places the blame for the conflict squarely on the soldiers who forcibly took food and blankets away from the Indians, and in particular one Indian woman. Some Acoma accounts revealed the battle erupted following the death of an Indian who refused to relinquish possession of food and blankets.
Onate was compelled to abandoned his friendship tour and Pacific exploration. He returned to San Juan, reaching that pueblo on December 21. Quickly Onate organized a punitive expedition to avenge the death of his nephew and teach the Acomas a lesson. On January 12, 1599, he ordered Captain Vicente de Zaldivar, brother of Juan, to take 70 men and sack the Acoma fort. The Spanish reached the base of Acoma mesa on January 21 and pitched tents. Reduction of the Acoma stronghold would be difficult. Indians effectively blocked the only access to the summit. On the 23rd, Zaldivar feigned scaling the north wall at the foot of the stairs. The ruse worked as Acomas collapsed on the threatened sector. Meanwhile, the night before, Zaldivar had concealed a dozen soldiers at the southern exposure. While the Acomas engaged the main force, the 12 rock climbers accomplished the impossible. They scaled the precipitous cliff without detection. Once on top of the 400-foot mesa, they attacked with impetuosity the rear of the startled Indians, forcing them to relinquish their position. Zaldivar's command then joined the Spaniards on top and began a movement toward the pueblo itself.

The mesa top is divided into two distinct sections separated by a ravine. The Indians sought refuge along the narrow ravine, but were forced to retreat into their rock fort. The persistent Spanish continued to press the Acomas. The Spaniards even managed to haul a cannon up the narrow stairway to the summit. Aiming the piece at point-blank range, they reduced the adobe and stone structures to a rubble. The Acomas surrendered about noon January 24, 1599. According to Spanish historians, Acoma casualties numbered in the hundreds. They reported the death of one Spaniard in the three-day battle. Rather than submit to the invaders, some of the Acomas elected to jump from the cliff. Out of a total population of approximately 6,000, about 600 surrendered. Many of the Acomas were imprisoned in the kivas. Later, the Spaniards took their prisoners, marched them to the edge of the cliff, murdered them, and tossed their corpses over the side.

The surviving Acomas were escorted under guard to Santo Domingo Pueblo to await trial. Under sixteenth-century Spanish law "all Acoma males over 25 years of age were condemned to have one foot cut off and to give 20 years of personal service; all males between the ages of 12 and 25 were to give 20 years of personal service. All females above the age of 12 were sentenced to give 20 years of personal service. Two Indian men who had been captured while visiting Acoma were sentenced to have their right hands cut off and to be sent back to their own Pueblos as a warning of what could be expected if Spanish authority was flaunted." On February 12 the guilty Acomas received their punishment. In all, some 60-70 Acoma women

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34 Ibid. Bancroft, History of Arizona and New Mexico, 143-145.


36 Bancroft, History of Arizona and New Mexico, 145.


38 Garcia-Mason, "Acoma Pueblo," 457; Myra Ellen Jenkins, "Onate's Administration and the Pueblo Indians," in When Cultures Meet (Santa Fe: Sunstone Press, 1987). 69 provides evidence that while amputations were meted out as punishment to the Acoma it was not widespread.
and children were transported to Mexico and turned over to the viceroy for final disposition. Many of the displaced Acoma found homes in convents scattered throughout Mexico.\textsuperscript{39}

The pueblo itself was in ruins. Chumpo and his peace proponents were brandished to the plains below the rock fort. Other Acomas not so friendly towards the Spanish returned to the mesa top and began the slow process of rebuilding their city and lives. The Spanish sacking of Acoma, however, had successfully fragmented the Acomas into pro-and anti-Spanish factions. "The pride and strength of the valiant Acomenses were broken forever."\textsuperscript{40}

Following the destruction of Acoma, Onate spent several years consolidating and strengthening his tenuous grip in New Mexico. In 1604, Onate realized his dream of completing an overland expedition to the western seas. He left San Juan and marched west crossing the malpais in the process. Onate's trip advanced him beyond Zuni land to the eastern shores of the Sea of Cortez. On his return, Onate stopped at El Morro and carved his name in the rock marking the earliest known inscription. Onate wrote: 'Passed by here the Adelantado Don Juan de Onate, from the discovery of the Sea of the South, the 16th of April of 1605.'\textsuperscript{41}

Onate's rule in New Mexico proved to be short-lived. He fell into disfavor with authorities in Mexico. In addition, the colonists became disenchanted with his administration. Onate resigned in 1607, supplanted with Don Pedro de Peralta. In either 1609 or 1610, the new governor transferred the capital from San Juan to Santa Fe.

New Mexico's early pioneers diverted their attention from seeking mineral wealth to domestic activities. Farming and livestock industries assumed high priority. Mexico City provided minimal direction. Bitter feuds between civil and ecclesiastical officials highlighted seventeenth-century New Mexico. Political upheaval and constant quarreling stymied any chance of development of the region's natural and human resources. The province was constantly in turmoil.\textsuperscript{42} Despite the chaos missionaries established a foothold in the pueblos and began in earnest the tedious task of winning converts. The influx of Spanish missionaries in the first quarter of the seventeenth century enabled a battery of friars to swell the role of Christianity to the outlying pueblos. To the east the Salinas pueblos of "Los Humanus," Abo, and Quarei were established. At Acoma, a bevy of priests arrived to assist in the rebuilding the mesa-top pueblo. The conversion of lost souls fell to Fray Andres Corchado. His sphere of influence included the pueblos of Acoma, Zia, Zuni, and Hopi. Because of the expanse of territory, Fray Andres could not devote the time, or the energy required to each pueblo.

A steady diet of priests at the pueblos, however, eventually cultivated the desired response. The chief cultivator at Acoma, Father Geronimo de Zarate Salmeron, arrived at the Sky City in 1620. Salmeron reported he succeeded in pacifying the natives, but he cautioned his superiors that the Acomas possessed a nasty history of hostile feelings towards the Spanish. But the primary settling force on the Acomas came from Fray Juan Ramirez, who arrived on the scene around July 1629. Fray Ramirez initiated construction of San Estevan del Ray Mission,

\textsuperscript{39}Minge, Acoma Pueblo in the Sky. 15.


\textsuperscript{42}National Park Service, The National Survey. Theme IV. Spanish Exploration and Settlement. 30.
which is still in use. Fray Ramirez gained widespread acceptance from tribal members for two miracles he allegedly performed. An eight-year-old girl had fallen off the cliff and Ramirez restored her unconscious form to the conscience world. In the second miracle recorded, he baptized an infant while on her death bed. When she recovered the Indians credited Father Ramirez with her miraculous turnaround. Ramirez spent more than 20 years among the Acoma people. He assisted the Indians in cultivating their natural resources. Fray Ramirez instilled in the tribe the value of planting gardens, growing fruit orchards, and raising livestock.

Westward, friars inundated the Zuni and Hopi pueblos. The Zunis and Hopis did not react favorably to the Franciscans either. The priest at Awatovi, a Hopi mission, died through poisoning. At Hawikuh Indians put to death two priests. True to form, the Spanish launched retaliatory raids on the Indians. Spanish soldiers marched via the Acoma-Zuni Trail, intersecting with the lava flows and Inscription Rock. One such carving in El Morro mentioned the killing of the priests: "They passed on March 23, 1632, to the avenging of the death of Father Letrado.-Lujan."

Spain’s primary seventeenth-century role in New Mexico focused on converting the Indians to Catholicism, especially along the heavily populated Rio Grande corridor. Economically, Spain found New Mexico a drain on the Spanish treasure. Despite New Mexico’s unprofitability Spanish authorities maintained a presence in the northern frontier. To abandon the unproductive province was tantamount to relinquishing the territory to Spain’s bitter New World competitors, France and England. Therefore, conversion of New Mexico’s Indian population assumed Spain’s chief thrust and guaranteed its foothold in the region. Peace with the Indians remained at best, tentative. Spain maintained law and order through intimidating, coercing, and mollifying the Indians. Spanish authorities continued the practice of enslaving the Indians or employing them as a cheap labor force. Pueblo Indians resented the foreign intruders into their homes and the displacement of cultural values. Pent-up frustrations exploded in 1680. Rising in revolt, the Indians threw off the mantle of oppression and struck viciously at their conquerors. Priests were murdered; missions torched. San Estevan del Ray Mission at Acoma miraculously survived the uprising. Resident priest, Fray Lucas Maldonado, was not so lucky. He perished in the revolt. Some accounts infer that Indians tossed him off the mesa top. All Spaniards not killed in the initial attack rallied at Santa Fe for a last stand. The attackers stormed the capital and forced its abandonment. Approximately 400 Spaniards died in the holocaust. The survivors, led by Governor Antonio de Otermin, fled down the Rio Grande to El Paso. For the next 12 years New Mexico belonged to the Indians.

The man selected to reconquer New Mexico for Spain was Don Diego de Vargas. In 1691, De Vargas arrived in El Paso where the remnants of the New Mexico colony had collected. De Vargas found that morale problems, foul weather, and attacks by neighboring bands of Indians exacerbated the refugees. A determined De Vargas spent lavishly from his own purse in preparation for a reconquest. In August 1692, De Vargas led a minuscule band of 60 Spaniards and 100 friendly Indians into New Mexico. He discovered the takeover easier than envisioned.


National Park Service. brochure "El Morro National Monument."

National Park Service. The National Survey, Theme IV, Spanish Exploration and Settlement, 30-32.
Following the expulsion of the Spanish in 1680, Pueblo Indians encountered difficulty in divorcing themselves from more than 100 years of Spanish culture and influence. The Pueblo Revolt disintegrated when the Indians fragmented into warring factions, thus allowing De Vargas to overrun all opposition.\textsuperscript{46} Initially, Santa Fe was reoccupied without bloodshed.

Capitalizing on his success, De Vargas embarked on a four-month tour to the Pueblos to show the Indians that Spain had officially returned to New Mexico. De Vargas followed the customary Spanish route through the malpais en route to Zuni and Hopi. On his return trip he encamped at Inscription Rock where he carved into the soft sandstone: "Here was the General Don Diego de Vargas who conquered for our Holy Faith, and for the Royal Crown, all of New Mexico at his own expense, year of 1692."\textsuperscript{47} De Vargas did not return to Santa Fe. Instead he veered southeast striking the Rio Grande at Socorro. Traveling to El Paso, he readied a second expedition designed for resettlement of New Mexico.

The reconquest by De Vargas did not terminate Indian resistance. Bloodshed punctuated his return in 1693. The Tano Indians occupied Santa Fe following the overthrow of the Spaniards. De Vargas had to storm the city in order to retake the capital, further proof that the capitulation of New Mexico's Pueblo Indians had been symbolic rather than reality. De Vargas began a six-year sweep in re-establishing Spanish dominion over the natives.\textsuperscript{48}

Spain had learned much about her northern province in a century and a half. Coronado and his successors roamed an uncharted wilderness. They had discovered a semi-desert region, poor in precious metals, but rich in human resources. In laying claim to the land and subjugating the inhabitants, Spain stamped an indelible trademark on the region that reflects that country's socio-economic contributions.

While the Spanish influenced the people of the region, the Spaniards, in turn, succumbed to the country's dominate geographical patternings. This was self-evident in the case of the malpais. Strategically situated, the malpais lay astride the Spanish travel route linking the Rio Grande Pueblos with the western outposts of the Zunis and Hopis. Despite the indomitable features of the lava beds, the malpais were a veritable oasis. Refreshing waters trapped in the lava, and thick stands of trees offered relief to the weary travelers. The malpais became a favorite resting place for Spanish wayfarers. The malpais springs and caves also attracted local Indians on their travels. Other Indians, such as Navajos and Apaches, who, like the Spanish were interlopers, utilized the malpais resources for their advantage.

At the close of the seventeenth century Spain had not altered its perception of New Mexico. The territory possessed few redeeming characteristics except for the salvation of native souls. Its inhabitants were poor. Spanish settlers were sparse. Economically, New Mexico offered few assets to the homeland. In return, New Mexicans received scant attention from the motherland.

\textsuperscript{46}Beck, \textit{New Mexico, A History of Four Centuries}, 86.

\textsuperscript{47}National Park Service, Brochure "El Morro National Monument."

\textsuperscript{48}National Park Service, \textit{The National Survey, Theme IV, Spanish Exploration and Settlement}, 31-32.
Noted Southwest historian, Adolph F. A. Bandelier, maintained that, “The New Mexico colony was an imperfect lightning-rod for the more renumbered Spanish possessions in Chihuahua and Coahuila.” Its pivotal role would be played in protecting the lucrative mines of northern New Mexico. New Mexico drained the royal treasury of Spain, but it was a cavity that had to be filled.
Following the Pueblo Revolt of 1680, the Indian population had undergone attrition—from 30,000 to 10,000. One-third of the Indian pueblos no longer existed. Few Spanish lived in New Mexico—a mere 1,500 in 1680. Eighty years later, in 1760, the Spanish population had only expanded to 8,000, reflecting the reluctance of native Spaniards to colonize Spain’s far-flung territories. To bolster New Mexico’s token Spanish population and spur immigration, the Crown offered land grants to newcomers. In theory, the land grants were structured to reward people for utilizing the land in a productive manner, usually in an agricultural setting. Before the Revolt, Spain granted large tracts for farming. With the decline of Indians as a cheap labor force, the huge estates yielded to smaller units called ranchos or individual ranches. The ranchos characterized the settlement pattern of New Mexico for the next two centuries and typified early settlements in El Malpais. The backbone of the immigrants to New Mexico in the eighteenth century were mestizos. Mestizos were a racially mixed group whose gene pool usually combined Spanish with Mexican Indian. Culturally, they were predominantly Spanish. Pure-blood Spanish comprised a token percentage normally limited to the aristocracy—such as government officials, priests, or new arrivals from Spain. Most of the 20,000 “Spanish” residing in New Mexico in 1800 were mestizo or better identified by today’s vernacular, “Hispanic.” Sheepherding became the largest industry as wool and meat markets developed. New Mexico’s first breed of sheep was the churro but later replaced by the more hearty and valuable merino. The merino became the standard breed in the sheep camps surrounding the malpais after the close of the Civil War.

With a gradual influx in population, settlements began to emerge in New Mexico. Most gravitated along the Rio Grande Valley and the Chihuahua Trail. El Malpais remained void of permanent human habitation despite benefiting from a highway linking Acoma and Zuni Pueblos. But population shifts did begin to impact the area, particularly the region north and east of Acoma. One such settlement was Laguna Pueblo established sometime between 1697-99. When New Mexico was reoccupied by the Spanish in 1692, a collection of about 100 Indians from the Pueblos of Cochiti, Cieneguilla, Santa Domingo, and Jemez fled to the Acoma sanctuary. Dissension soon filtered through the rank-and-file at Acoma, culminating in a separatist movement in 1697. The disgruntled Indians vacated the isolated citadel and moved 14 miles northeast, establishing their own pueblo called Laguna on the Rio San Jose. By 1707, the population at Laguna numbered 330 or about half of Acoma. The community aided its own cause by placating the Spanish—something the truculent Acomas had been unwilling to do, which added immeasurably to their demise and misery. By 1782, the Lagunas had prospered so that their population equalled the Acomas. This trend reflected the continual abandonment by the Acomas of their mesa top in favor of joining forces with the Laguna. Moreover, a declining population base coupled with a difficult lifestyle on the isolated mesa top forced the

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1 Tainter and Gillio, Cultural Resources Overview, 130.
2 Ibid., 130-131.
3 Ibid., 130.
4 Ibid.
Acomas to re-establish their agricultural fields at Acomita and McCarty's just east of El Malpais.\(^6\) Although Acomas and Zunis had been permanent dwellers of El malpais for at least several centuries, their influence and dominion in the region evaporated in the wake of Spanish conquest. Besides Spanish invasion, Puebloens faced two new powerful and formidable adversaries in the late decades of the sixteenth century. Athapaskan tongues occupied the Rio Grande watershed south and north of Acoma. These Gila Apaches as the Spanish called them, later to be known as the Eastern Chiricahua Apaches, targeted Zuni, Hopi, and Navajo Strongholds in raids to the north.\(^7\) Like the Gila Apaches, Navajos were Athapaskans and cousins of the Apaches. It is not known when the Navajos splintered from the Gila but by the end of the sixteenth century, Navajo domain extended as far south as Canyon Largo northwest of Jemez Pueblo. Navajo raids and trading with the Pueblos, however, probably occurred on a frequent basis. The 1583 Espejo-Luxen journey mentions Querecho Indians at Acoma. The Querechos were probably Apaches and thus the Indians reported at Acoma could have been either Navajo or Apache.\(^8\)

The acquisition of horses from Spanish forces transformed these hunter-agriculturists into formidable raiding parties. During the early decades of the 1700s, Navajos began raiding the Pueblos and Spanish camps with a fierce impetuosity. Fortunately for the Lagunas and Acomas, the lightning-fast strikes of the Navajos diminished between 1716-1768. Ute encroachments into northern New Mexico and Arizona compelled the Navajos to divert their attention from the Laguna-Acoma-Spanish settlements and concentrate solely on repelling the raids of the Utes.\(^9\) Under attack from Ute-Comanche forces, the Navajos moved their territorial claims southward. Largo Canyon now became the northern boundary of Navajoland and Laguna-Acoma became the southern border. By 1772, the southerly migration had brought the Navajos into contact with the Gila Apaches. Forming an alliance, the two tribes waged war on Spanish settlements along the Rio Puerco. The raids were so devastating that by 1774, the Spanish settlements along the Rio Puerco were abandoned for a time.\(^10\)

Earlier Santa Fe officials attempted to settle the Navajos permanently, at least the peaceful factions. In 1748, a mission at Cebolleta, located about ten miles north of Laguna, was established for the Navajos. When provisions failed to arrive in a timely manner, the mission

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\(^9\)Ellis. "Laguna Pueblo." 441-442.

\(^10\)Schroeder. El Palacio. 11.
became an abortive endeavor. Instead, the Cebolleta mission became an extension of the Laguna community. Farming and livestock husbandry began to emerge, but it was a tenuous foothold at best. The Navajos took exception to the intrusion on their territorial rights. Recurring Navajo attacks on Cebolleta were so stinging that the area was again abandoned for a short period in 1782. When the raids finally subsided, Spanish settlers repopulated the region. To repel future Navajo sorties—and there would be many—the inhabitants of Cebolleta built the traditional Spanish plaza for defense.

For a decade, the Spanish endeavored to drive a wedge into the Navajo-Apache alliance. In 1785 they succeeded. Spanish officials persuaded the Navajo to join forces with them in raids against their Apache kinsmen. Navajo warriors accompanied Spanish expeditions into present-day Arizona and southwestern New Mexico. The Spanish-Navajo alliance lasted until 1796, when the Navajo and Apache mended their differences, and once again formed a loose alliance. Raiding continued but on a reduced scale.

Spanish explorations in the eighteenth century decreased due to unrelenting battles with recalcitrant tribes and the perennial flare-ups at pueblos, which kept Santa Fe officials in a constant state of flux. Internal bickering between the church and Santa Fe did nothing to ameliorate conditions and extracted a toll on human and financial resources. Nonetheless, there was one major expedition in the last quarter of the eighteenth century that involved El Malpais. Concurrent with Spain’s desire to boost presence in New Mexico was its buildup of California. In between the two territories lay lands that had not been sufficiently explored. Moreover, officials hoped the junket would discover a good road linking the northern empire of California with that of New Mexico. A tertiary objective was the ever-present doctrine of converting the demented souls of the Native Americans to Christianity.

The expedition fell to two Franciscans friars, Francisco Atanasio Dominguez and Silvestre Velez de Escalante. Known as the Dominguez-Escalante expedition, it departed Santa Fe on July 29, 1776. The two priests traveled with a small entourage that did not include military personnel. Their excursion penetrated the interior of the Great American West. By the time the touring clergymen returned to Santa Fe, on January 2, 1777, the priests had traversed nearly 2,000 miles. In their travels they made a wide arc journeying through northwestern New Mexico, western Colorado, and central Utah before turning southward and entering northern Arizona. On November 24, the party reached Zuni Pueblo. They remained at Zuni

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13Ibid., Ellis reports that the Spanish families began moving into the area around 1800.
14In 1804 Navajos sacked Cebolleta. Several months later the Navajos returned with a larger assemblage. Only the propitious arrival of Spanish soldiers stymied the attackers. See Tainter and Gillio. *Cultural Resources Overview*. 130-131.
until December 13 in order to rest and to participate in several religious ceremonies. On the 13th they started for Acoma camping for the night at the base of El Morro. The 14th found the explorers trudging passed the malpais on the way to an evening at Ojo del Gallo (Chicken Spring at San Rafael). Regrettably, Father Dominguez did not record in his journal any impressions of the malpais. The next day’s proceedings pierced the malpais with the party encamping at McCarty’s. On December 16, the clergymen reached Acoma. 19

Although the expedition failed to discover a suitable east-west road linking California to New Mexico, it more than compensated with extensive knowledge concerning the geography of the country and establish contacts with new Native Americans. Cartographer Don Bernardo Miera y Pacheco proved invaluable for the set of accurate maps he generated. 20 As one historian of the expedition revealed: "Theirs was the last of the great Spanish explorations. Other men, serving other rulers, would secure the vast lands of the American wilderness. Yet nothing robs the Dominguez-Escalante expedition of the achievement of valiant men challenging the unknown." 21 Spain would remain master of its empire for another 50 years. The mother country’s grip on her kingdom, however, had been badly shaken. Political upheaval in the New World and Europe brought to an end nearly 300 years of Spanish rule in America. With the advent of the nineteenth century, Spain had to contend with yet another up-start--the United States.

With the finalization of the Louisiana Purchase in 1803, the United States became embroiled in a boundary dispute with Spain. Suspicious of United States expansionism, Spain outfitted a large army at Santa Fe. Under the leadership of Lt. Facundo Melgares, the soldiers patrolled the eastern plains with orders to keep the Americans off Spanish soil. Few Americans were encountered, and Lt. Melgares spent much of his time negotiating treaties with neighboring Indians, particularly the Pawnees.

Meanwhile, the United States was anxious to see what kind of deal it had made with France. It quickly organized a small military force, consisting of 22 soldiers under Lt. Zebulon Pike, to reconnoiter the new domain. Pike encountered the same Pawnees of Melgares and requested their loyalty to the United States. Pike continued his trek westward eventually entering present-day Colorado and building a temporary stockade in the San Luis Valley along the Rio Conejos. Here at his encampment, Spanish soldiers intercepted Pike. They informed Pike that he was trespassing on Spanish territory. A dumbfounded Pike had either erred in his calculations or had received instructions to intentionally provoke the Spanish. Pike, of course, claimed that he had simply erred. Under Spanish escort, Pike went to Santa Fe and ultimately

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18(...continued)

18 Ted Warner, editor. The Dominguez-Escalante Journal (Provo: Brigham Young University, 1976). 116. Fathers Dominguez and Escalante resided at Zuni for nearly three weeks. One theory states the priests remained to participate in the Feast of Our Lady of Guadalupe, which took place on December 12. Another reason for lingering at Zuni was to allow Father Dominguez time to inspect the mission, part of the functions of his journey. Zuni Pueblo was Fray Escalante's appointed mission and may have been the reason for the lengthy stay at the pueblo.


on to Chihuahua where he was interrogated and set free. Pike's account of his expedition, printed in 1810, gave outsiders and Americans the first glimpse of life in northern Mexico.\textsuperscript{22}

To the Spanish, Pike's foray served notice that foreign interlopers, especially the audacious Americans, were beginning to recognize the economic opportunities that New Mexico presented. Pike's penetration into New Mexico created a stir. New Mexican representative to Spain, Ron Pedro Pino, requested a larger share of funding to confront any future American sorties. Pino's appeal fell on deaf ears because Pike's trespass paled in comparison to Spain's mounting problems in the New World. Discord and revolution in Mexico and South America brewed a boiling caldron that Spain no longer could keep under control.\textsuperscript{23}

Spain appealed to the citizens of Mexico to fight the revolutionaries. On September 27, 1821, Mexico declared her independence from Spain. New Mexico became part of the Republic of Mexico. Because of New Mexico's isolation from Mexico City, news of Mexico's overthrow of Spain did not reach Santa Fe until December 26. Spanish-turned Mexican subjects celebrated the occasion with a fiesta on January 6, 1822.\textsuperscript{24}

For the next quarter century, Mexican authority ruled New Mexico. The open-door trade policy with the United States became the single most important event of the Mexican period. Under Spain, free trade with the United States had been prohibited, partially out of Spain's desire to monopolize all trade in New Mexico. With Spain's economic tentacles severed, Mexican officials looked to the United States as a trading partner. Americans were eager to accommodate. The dust had barely lifted from the war with Spain when the first wagons laden with trade goods hit the Santa Fe Trail and opened a corridor between the United States and Mexico.

While Mexico enlarged her sphere of trading partners, it also looked at enlarging its Hispanic population base. Hispanic settlements continued to grow but at a snail's pace. Most immigrants tended to gravitate in the direction of the Rio Grande Valley. Movement towards the malpais was nil. However, by the 1830s Hispanic communities at Cubero, east of El Malpais, and San Mateo, north of El Malpais, took root. Cubero was the more significant. Its proximity, astride the 35th parallel, made it a convenient stopping point for travelers on the Acoma-Zuni road.\textsuperscript{25}

New Mexico under the flag of Mexico was short-lived. Like Spain, Mexico exhibited a generally apathetic attitude to her northern colony. Economic and military support remained weak. Mexico faced constant political upheaval and threats of revolutions in Mexico and Texas. These distractions weakened Mexico's alliance with New Mexico. In turn, New Mexican officials were plagued with internal discord; officials resigned in disgrace. Constant raids by

\textsuperscript{22}Maurice Fulton and Paul Horgan. \textit{New Mexico's Own Chronicle} (Dallas: Banks Upshaw and Company, 1937), 77-78.

\textsuperscript{23}Ibid., 81.

\textsuperscript{24}Ibid.

\textsuperscript{25}Richard F. Van Valkenburgh. \textit{Dine Biiyevah} (Window Rock, Arizona: United States Department of the Interior, Office of Indian Affairs Navajo Service, 1941), 48. Cubero's origin goes farther back than the 1830s. Founded in the eighteenth century, it developed into a Spanish military post and Navajo trading post. United States troops occupied Cubero in 1846. They used it sporadically until 1851. Cubero takes its name from Spanish Governor Don Jose Cubero. Variants of the name appear on maps and related New Mexico histories--Cubera, Cubberro, and Cuvero. The 1776 Dominguez-Escalante map spells it Cubera.
Indians on other Indians, Indians against Hispanics, and Hispanics against Indians reduced the weak Mexican government's ability to respond effectively.

Matters worsened in 1846. Mexico entered the war against the United States. The root of the conflict rested with expansionist ideals of the United States coupled with Mexico's inability to foster a long-standing government for its people. American armies, their ranks swelled by volunteers responding to the "Call for Arms," advanced on Mexican-held lands in Texas, New Mexico, and California. An unprepared Mexico, its citizen-army in disarray, could do little to resist the American advance.

In the mind set of the United States Government, New Mexico represented a stepping-stone in the more important conquest of California. Instructed to capture California, Col. Stephen Watts Kearny received orders to plant an American-backed civilian government in New Mexico en route to California. Kearny discovered New Mexico easy pickings. The American Army under Kearny rode into Santa Fe on August 18, 1846. Like De Vargas, who had retaken Santa Fe without bloodshed from the Indians 154 years before, Kearny duplicated the maneuver. New Mexico fell without a shot being fired. Officially, the next day, Governor Don M. Armijo surrendered the city.26

New Mexico now belonged to the United States of America. The passing of the baton abruptly terminated more than 300 years of Spanish-speaking control of New Mexico. Under Spanish influence, the region's native inhabitants had been conquered, and, for the most part, its people assimilated into the mainstream of Spanish culture. Yet, Spain failed to comprehend New Mexico as anything more than a stagnant province, yielding little in economic benefits. New Mexico remained neglected, while Spain grappled with political problems in Mexico. When Mexico claimed independence, New Mexicans were delighted. The new regime, however, did nothing to resolve the economic and political disorders saturating New Mexico. To Mexico City, Santa Fe remained just as remote as it did under Spain. The open-door trade agreement between Mexico and the United States benefitted both nations. The chief benefactor, however, was the United States.27

When the Mexican War ended, New Mexico formally became a United States Territory with the ratification of the Treaty of Guadalupe Hidalgo, August 30, 1848. Under the United States New Mexico would witness wholesale changes, especially economic growth. El Malpais would see change too, for it would no longer be just a highway passing through or around "bad country." Up to the period of American occupation and takeover, El Malpais remained a stopover for passing bands of Indians--Apaches and Navajos. But permanent settlements nearer the malpais began to emerge by the middle of the eighteenth century--Cubero and Cebolleta. The two communities prospered under Mexican rule and quickly became the dominant towns in west central New Mexico. They took on added importance as New Mexico's first line of defense against the intensified raids of the Navajos that occurred in the first half of the nineteenth century.

26 Tainter and Gillio, Cultural Resources Overview, 132-133.

27 Beck, New Mexico, A History of Four Centuries, 119.
CHAPTER IV
AMERICAN SURVEY PARTIES IN EL MALPAIS

On the day New Mexico surrendered, August 19, 1846, Stephen W. Kearny, now a General, proclaimed in a speech before a throng of New Mexicans that he and his government were committed to protecting the rights of all citizens. In official reports, a triumphant Kearny declared the conversion of New Mexico to American control an orderly undertaking. He appointed an interim civil government and promulgated a code of laws. But as Col. Alexander Doniphan, commanding the First Missouri Volunteers retorted, "A people conquered but yesterday, could have no friendly feeling for their conquerors who have taken possession of their country." Disposed Mexican officials and Indians resented the surly attitude and presence of the invading Americans on their soil. Moreover, Kearny had assured the citizens that in exchange for their support he would provide protection from marauding Indians. It was a promise he could not keep. A revolt was eminent.

Kearny detached the First Missouri Mounted Volunteers under Col. Doniphan to help suppress the Navajos and stand ready to offer assistance to the new civil government headed by acting-governor Charles Bent. Earlier, in mid-September, Kearny dispersed his remaining occupation forces to cover the approaches to the Rio Grande settlements. At Cebolleta about ten miles east of El Malpais, Doniphan stationed three companies of his First Missouri, with Lt. Col. Charles F. Ruff commanding.

Kearny's stay in New Mexico was scheduled to be brief. California remained his primary objective and he proceeded with plans to conquer California. Kearny barely disappeared from view when trouble erupted particularly with the Navajos, Utes, and Apaches. The three Tribes initiated punitive raids on New Mexican settlements. The Navajos utilized three routes to approach the Rio Grande villages and towns. All three avenues dusted the borders of the malpais. One trail followed the Rio Puerco watershed east of Mount Taylor. A second path passed north of the small outpost of Cebolleta. The third approach lay west of Mount Taylor and led directly into the Rio San Jose drainages.

When the Dine, as the Navajos called themselves, did not refrain from their attacks, Col. Doniphan plunged headlong into a fall campaign. His plan was simple. The troops would converge on the Navajos by separate routes, "chastising the Navajos wherever they appeared hostile." Captain John W. Reid from the Cebolleta outpost took 30 men into the heart of Navajo country to negotiate a treaty. At Ojo del Oso (Bear Spring) located 15 miles east of present-day Gallup on the site of Fort Wingate, Reid conferred with more than 800 Navajos. He convinced the assemblage to enter a treaty with the United States, and he then retired to

1Beck, New Mexico A History of Four Centuries, 134-136: quotation taken from William E. Smith. The Francis Preston Blair Family in Politics. 2 Vols. (New York: n.p., 1933), n.p.; The prophecy of Doniphan crystallized on January 19, 1847, in Taos when Governor Charles Bent and five other people were murdered. Bent must shoulder some of the blame for his death since he failed to adequately measure the feelings of the people. Just a few weeks before, Bent had uncovered a plot to kill him, but he convinced himself that no harm would come to him.


Cubero with the Navajos promising to follow. The nervous Navajos, fearing an attack from Doniphan, returned to Ojo del Oso before reaching Cubero, or consummating a treaty.

On November 21 Doniphan followed the Navajos to Ojo del Oso hoping to conclude a treaty. Navajos converged on the site to confer with the Long Knife soldiers. Some confusion existed initially in the negotiations. The Navajos failed to comprehend why the Americans desired them to halt their aggressions toward the New Mexicans. After all, as the Navajos pointed out, the Americans had made war against the New Mexicans. Some delay was incurred as Doniphan attempted to explain the difference, presumably with only partial success. Ultimately the assembled Navajos agreed to a treaty. The Bear Spring Treaty stipulated that the Navajos would live in peace with the United States, the Pueblo tribes, and the New Mexicans. Leaving Ojo del Oso, Doniphan made a similar treaty with the Zunis. Doniphan returned to Cebolleta via the headwaters of the Rio Pescado rather than circumventing the Acoma-Zuni corridor.

Doniphan's treaty was but one in a long line of failed negotiations with the Navajos. Hostilities between the two races worsened. Frustration heaped upon more frustration ripened into an embittered attitude that allowed no solution. In 1851, Col. Edwin V. Sumner reached Santa Fe as commander of the Ninth Military Department of New Mexico. Sumner, an Army Regular, earned a reputation as a tough frontier-hardened officer. He also possessed a reputation for being intelligent as well as stubborn. The totally unabashed Sumner did not endear himself to the citizens of New Mexico when he unflatteringly reported that the, "New Mexicans are thoroughly debased and totally incapable of self-government, and there is no latent quality about them that can ever make them respectable. They have more Indian blood than Spanish, and in some respects are below the Pueblo Indians, for they are not as honest or as industrious."

Despite his advanced age, he was 54 years old in 1851, Sumner exhibited zeal and enthusiasm in carrying out his assignment. Immediately he reorganized the placement of his troops. He established Fort Union near Las Vegas as departmental headquarters supplplanting Fort Marcy at Santa Fe. He removed troops from the Cebolleta garrison and began construction of a post near the Defiance Mountains at a Navajo shrine dubbed Tse Hot' Sohih (Meadows between the Rocks). Sumner dubbed the new five-company garrison Fort Defiance. Situated deep within Navajo domain, the fort had the desired effect of reducing raids. To augment his new forts,
American Survey Parties In El Malpais

the indefatigable colonel initiated the dispersal of provisions to supplement the tribe's meager food during the winter months.\(^{10}\)

In addition to the development and placement of military posts in New Mexico, the United State Army engaged in a host of scientific explorations to learn more about their newly acquired territory. Lt. James W. Abert had accompanied Kearny into New Mexico for the expressed purpose of mapping and writing a comprehensive scientific report on New Mexico. Abert, son of Col. John J. Abert, Chief of the Corps of Topographical Engineers, possessed a keen eye and a scholarly mind. Abert toured the new territory but spent the bulk of his time in the Rio Grande valley. Abert visited the western edges of New Mexico including Acoma but did not go into El Malpais.\(^{11}\)

Three years later in 1849, Lt. James H. Simpson of the Topographical Engineers, Ninth Military Department, attached himself to a punitive expedition against the Navajo under the command of military governor Lt. Col. John M. Washington. The assembled military represented a formidable force, consisting of four companies of infantry, two of artillery, and a detachment of Mexican and Indian volunteers. The command proceeded west roughly coinciding with the 36th parallel. By accident, the expedition stumbled on the extensive ruins of Chaco Canyon. Through the descriptive pen of Simpson and his scribes, the ruins and their condition were described. Continuing westward, the army made contact with a band of Navajos at the foot of the Chuska Mountains. An exchange of gunfire erupted between the two forces. Washington positioned his artillery and fired several salvos towards the Indians. The artillery shells produced the desired psychological impact to sufficiently demoralize and scatter the Indians. Six Indians were reported killed including one aged chief, Norbana.

Washington's column marched undisturbed into the very abyss of Navajo strongholds--Canyon de Chelly. Navajos under Martinez sued for immediate peace. Meanwhile, Simpson and his crew of scientists duplicated their accomplishments at Chaco Canyon by recording for posterity Navajo hogans and customs. In addition, the scientists collected an assortment of potsherds and other scientific and archeological specimens. Exiting Canyon de Chelly, Washington proceeded south via Canyon Bonita, future site of Fort Defiance. The expedition continued south stopping at the historic pueblo of Zuni. From Zuni the column plodded along the well-worn Acoma-Zuni Trail camping at El Morro. Through Simpson's foresight, he and his team copied to the delight of future historians every legible inscription found on the rock. Before departing Simpson left his own inscription, the first in English: "Lt. J.H. Simpson USA & R.H. Kern Artist, visited and copied these inscriptions, September 17th 18th 1849."

Upon leaving El Morro, Simpson's crew followed behind the main column. The route carried them to the vicinity of the future village of Tinaja located about 12 miles west of Bandera Crater. Proceeding eastward, Simpson crested the Zuni Mountains along Oso Ridge. At the summit Simpson gazed north and caught sight of a towering mountain peak about 30 miles distance. So impressed with the dominant character of the mountain he named it Mount

\(^{10}\)Ibid., 153.

\(^{11}\)James W. Abert, Abert's New Mexico Report, ed. William A. Keleher (Albuquerque: Horn and Wallace, 1962), vi-vii. see also Senate Executive Documents, 30th Cong., 1st sess., No. 23 (1848); also House of Representative Executive Documents, 1st Sess., No. 41 (1848).
Taylor, in honor of President Zachary Taylor and proclaimed it, "an ever-enduring monument of his patriotism and integrity."12

Ascending Zuni Mountain, the caravan reached the cool waters of Ojo de Gallinas. Here Simpson and his fatigued men found "some good water and grass." Three miles farther through hills of pine-barren country brought Simpson his first glimpse of El Malpais. Unlike earlier explorers who casually referenced the malpais, Simpson recorded every minute detail of their wonder. He referred to them as, "some unseemly piles of blackened scoriaceous volcanic rocks."13 Following the narrow course of Canon de Gallo (Zuni Canyon), the little band of intrepid explorers entered the fertile valley of Ojo del Gallo to camp with the main body of troops. Washington's campsite was situated about a mile northwest of the future site of the first Fort Wingate. On September 19, 1849, the command departed Ojo del Gallo heading nearly due east. The first couple of miles traversed the rich and open meadows of the Gallo valley interspersed with lava deposits. Simpson described the lava as, "A great deal of scoriaceous matter, in black angular fragments, lies scattered over the surface of this valley in piles and ridges; and it is doubtless owing to this source that its soil is so fertile; for wherever this igneous product is observable, there have I noticed the soil in proximity to it to be of this character."14

The journey from del Gallo took the travelers in the Rio San Jose valley at a point about three miles east of present-day Grants near the intersection of Interstate 40 and New Mexico 117. On traversing the malpais, Simpson noted that with benefit of a few picks and shovels the valley could be negotiated by wagons. That visionary idea of Simpson would be planted with telling impact in the heads of his superiors. Moreover, Simpson's eyewitness survey represented the first accurate data on northwestern New Mexico and northeastern Arizona. Simpson's scientific survey was significant for its discovery and description of the Chaco and Canyon de Chelly ruins and the new information on the puebloan Indians. Simpson laid the groundwork for future anthropologists, like Adolph Bandelier and Lewis Morgan.

The military agreed with Simpson's recommendations. In 1851 Capt. Lorenzo Sitgreaves began a reconnaissance to scour the territory west of Zuni for the purpose of finding a suitable wagon road. Sitgreaves's caravan proceeded west to the Little Colorado River on a course that would carry them south of the Grand Canyon. Despite repeated assaults by Yampais, Cosnino, Mojaves, and Yumas Indians, the command reached the safety of Fort Yuma on the Colorado River. After a brief respite, they completed their travels to San Diego. Sitgreaves's final report, however, lacked the detail of Simpson's. Moreover, some of his route proved unfavorable for an overland wagon trail. Yet, Sitgreaves expedition was significant for it added to the knowledge of the region and supplied missing pieces to the landscape features of Arizona. His route from Zuni to the Colorado River confirmed the belief that portions of the territory were suitable for wagon traffic. Years later the Santa Fe Railroad benefitted from Sitgreaves's work and utilized a large segment of his route.16


13Ibid., 141.

14Ibid., 143.

15Ibid.

Following Sitgreaves's endeavor, the United States government embarked on an ambitious plan to extensively survey the American West and to find suitable transcontinental railroad routes. Now referred to as the Pacific Railroad Surveys, five expeditions received congressional funding to test the suitability of constructing transcontinental roads. Potentially any of the routes could prove lucrative for the selected regions as well as the adjacent communities. Lt. Amiel W. Whipple received the assignment to head up the 35th parallel survey that originated from southwestern Missouri. Missouri Congressman, J.S. Phelps of Springfield in the states southwest corner, spearheaded the project since it was Phelps's constituents who stood to gain from the enterprise. Politics notwithstanding, the 35th parallel potentially represented an excellent route. It was strategically situated between the Midwest and the upper South and, thus, presented the best opportunity to secure a compromise between the Northern and Southern politicians.

Whipple like Simpson was a professional. Formerly he had served on the Mexican Boundary Commission as assistant astronomer. He assembled his crew at Fort Smith, Arkansas, leaving that garrison on July 14, 1853. Encumbered with scientific instruments, Whipple's crew group set their course for Albuquerque where they would pick up a military escort. Leaving Albuquerque, the survey party proceeded westward reaching Laguna Pueblo. On November 15, the command's route paralleled the Rio San Jose valley passing within 6-8 miles of Mount Taylor. When the lava beds came into view a few miles west of Laguna, Whipple like Simpson, was intrigued by them. Approaching Ojo del Gallo Whipple noted: 'The whole length of the valley followed to-day has been threaded by a sinuous stream of lava. It appears as if it had rolled down a viscous semi-fluid mass, had been arrested in its course, hardened, blackened, cracked, and in places broken, so as to allow the little brook to gush from below and gurgle along by its side. The lava bed is frequently a hundred yards in width, the cross-section being a semi-ellipse, in the centre probably thirty feet high.'

From the "Hay Camp," the name applied to the lush, grassy meadows found in the Ojo del Gallo Valley, Whipple divided his party to survey three converging roads. One column followed Simpson's 1849 route to Zuni; another command traveled the military road leading west to Fort Defiance. Whipple accompanied the third contingent, which traveled south, utilizing portions of the Acoma-Zuni trail. Whipple's party camped in the Zuni Mountains eight miles from Agua Fria Springs. Whipple continued to Zuni after camping at El Morro where he waited for the balance of his columns.

From Zuni the survey crew examined the region to the Colorado River. Whipple's report spoke favorably of a railroad route along the 35th parallel. Because of an error in estimating cost of railroad construction, the original estimate submitted by Whipple approached an eye-popping $169,210,265. Congressional support wavered in the face of staggering cost figures. Later Whipple reevaluated his estimates and scaled down the costs to $94 million, making it more competitive with the other railroad surveys. As it turned out, all five routes were deemed practical, however, the impending sectional crisis splitting the nation placed an indefinite hold on all transcontinental construction.
In 1857, Lt. Edward F. Beale of the United States Navy conducted the last of the military's surveys through El Malpais. Congress appropriated more than a half million dollars to construct wagon roads to the Pacific coast of which $50,000 had been channeled to the wagon road along the 35th parallel. Beale was no novice to the task. In 1853 he had been involved in a wagon road survey along a Central route that started in Westport, Missouri, and concluded in Los Angeles, California. Beale's journey consumed three months and 1,850 miles. What separated Beale's 1857 expedition from the rest of the expeditions, was his means of transportation. A herd of 76 camels accompanied Beale's party. Herded by Turks, Greeks, and Armenians, the United States Government purchased the dromedaries in an experiment to test their practicability and adaptability to the Southwest environs. Beale, an ardent proponent of camel travel, sold the concept to then Secretary of War Jefferson Davis.

On June 25, 1857, Lt. Beale departed on his expedition from San Antonio. His route took him west to El Paso where he pushed north up the Rio Grande reaching Albuquerque in early August. From Albuquerque, Beale and his ships of the desert plodded westward. On August 16 the camel corps and construction crew reached Acoma Pueblo. The next day Beale observed the Rio San Jose and its abundance of agricultural crops of wheat and corn. On the 18th camp was pitched on the Gallo presumably near the site of San Rafael. Captivated by the immense lava flows in the vicinity Beale reported: "The little valley of the Gallo presents a most singular appearance. Directly down the centre, and rising to a height of some twelve feet, a stream of lava has flowed, and apparently ceased somewhere near our camp of yesterday. . . . The whole valley is so completely filled with the solid lava as to leave only here and there a narrow belt of meadow." Beale continued his journey eventually reaching Los Angeles. To test the feasibility of his wagon route in the winter, Beale selected 20 men and promptly retraced his route. The return path carried Beale by Inscription Rock and his campsite on the Gallo. At Gallo Beale recorded: "Crossed many streams of lava, which appear to have rolled in a fiery torrent just as a mountain stream from the hills. . . . We encamped at 10 [February 21, 1858] near our old place on the Fort Defiance road, having been absent seven months. Here my labors ended; the main road to Fort Defiance being intersected at this point by that which I have explored and surveyed to Fort Tejon, California."

Wagon-road superintendent Beale was not through with his El Malpais travels. Beale petitioned his friends to appropriate additional funding to solve engineering problems discovered along

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22 Jackson, *Wagon Roads West*, 245; Bender, "Military Transportation in the Southwest, 1848-1860" reports 25 camels went with Beale.


25 Ibid., 33.

26 Ibid., 86-87.
the 35th parallel. The Army Appropriation Act of 1858 granted $50,000 to build bridges and improve stream crossings between Fort Smith and Albuquerque. Congress appropriated one hundred thousand dollars to develop the highway from Albuquerque west.27

With an economic boost from the government, Beale was again trudging pass the malpais with his camels. On March 12, 1859, he recorded in his notes that they camped at Ojo del Gallo. Beale, the hunter, together with his black servant, Absalom, bagged between 60-80 ducks--canvas-back, red-head, mallard, and spring-tail.28 Beale's party spent nearly two weeks grading the road between Ojo del Gallo and Inscription Rock. The road construction crew continued their westward trek reaching the Colorado River in May. At the terminus Beale proudly proclaimed the wagon road complete and ready for six-mule team wagons and loads up to 3,500 pounds.29 Beale requested more funding to fix the road west of Albuquerque but the Ways and Means Committee of the House of Representatives did not act on the measure bringing to an end Beale's road-building career.

The work of Beale and the other surveyors, explorers, and scientists of the 1850s impacted the future development of El Malpais region. In 1866, Congress provided land but no financial backing for a railroad route west along the 35th parallel. Initially a charter was awarded to the Atlantic and Pacific Railroad Company headquartered in Springfield, Missouri, but later the completion of the 35th parallel railroad became the task of the Santa Fe Railroad.30

The American survey explorations that came through the malpais proved vastly different from the earlier Spanish travels. Whereas the Spanish primarily explored the region for mineral exploitation, they attached no scientific importance to the region. The malpais merely represented an impediment to travel. The army explorations were detailed analysis of the United States' new acquisitions. The reports of Simpson, Sitgreaves, Whipple, and Beale provided the first in-depth information about the malpais themselves. No longer were lava beds just obstacles to travel, the surveys elevated them to a scientific plateau, albeit still somewhat of a natural curiosity. Moreover, military and civilian explorations provided the nation with new knowledge of the region's cultural past and insight into its geographic composition. The geographical data would prove invaluable when the private sector secured funding and grants for construction of trans-continental railroads.

The military probes also escalated contacts with Native Americans, particularly the Navajos and Apaches. Relations with the tribes continued to deteriorate, however, as the new American government in New Mexico sought to preserve a fragile peace between the Hispanics and the native tribes. Navajos and Apaches continued their raids on the Rio Grande settlements. New Mexicans countered with punitive expeditions of their own. To deal with the problem, the government built new forts on the region to preserve peace and reduce raiding from both sides.

27Jackson, Wagon Roads West, 251.


29Jackson, Wagon Roads West, 255.

One of the first items on Col. Edwin V. Sumner's agenda when he reached Santa Fe in July 1851, was to superintend to Indian affairs within his jurisdiction. As commander of the Ninth Military District, Sumner assumed control of a vast territory comprising present-day Arizona and New Mexico and portions of Utah and Texas. Sumner quickly established military posts to protect frontier settlements. Fort Defiance, situated north of present-day Gallup at Cañon Bonito, was authorized in 1851 by Col. Sumner. Fort Defiance, Sumner hoped would act as a deterrent against Navajo forays on the Rio Grande or pueblo settlements.

In actuality, the erection of Fort Defiance had little impact on repressing attacks of the Indians. Its presence was more a symbolic deterrent than actual. Navajos persisted in raiding settlements up and down the Rio Grande corridor. Col. Sumner retaliated in 1851 with a summer campaign. The elusive Navajos managed to avoid clashes with Sumner's superior force and the army returned to Santa Fe with negligible results. In 1852, the military conferred with some of the Navajos at Jemez Springs. The gist of the talks swirled around the American's request for the cessation of Navajo strikes. The conference failed because the Navajos simply refused to attend as promised. On May 27, a dejected Sumner penned a note to Secretary of War, C. M. Conrad, stating it would be in the government's best interest to return New Mexico to the Indians and Mexicans.

American efforts to induce the Navajo to sign a peace treaty persisted. Finally, in 1855, the American government assembled a significant number of Navajos at Laguna Negra, located about 14 miles from Fort Defiance. Several Navajos were prominent in the peace negotiations who acquired "chief" status from the government. Zarcillos Largos, Manuelito, Barboncito, and Ganada Mucho represented the Navajos. Governor Daniel Merriwether, Brig. Gen. John Garland, the military district commander, and Navajo agent, Henry L. Dodge, presented the U.S. Government position. An uneasy truce prevailed until 1858. Then the fragile treaty caved-in, precipitated by a series of cultural misunderstandings.

At the root of the problem stood grazing privileges. Manuelito complained to officials at Fort Defiance that the Navajo would no longer permit the soldiers to pasture their livestock on lands ensconcing the post. The treaty of 1855 stipulated the government could graze its animal on adjacent Indian land outside the garrison. Manuelito argued the Indians needed the grasses for their livestock, pointing out that the military possessed many wagons in which to haul provisions. Serving eviction notice on the soldiers, the Navajos proceeded to pasture their sheep and cattle closer to the fort. Major William T. H. Brooks, commanding at Fort Defiance, ordered soldiers to chase away the livestock. When the Indians resisted, a skirmish erupted with the big loser, the Navajo cattle. The Navajos demanded payment for the cattle, which the Army rejected.1

In August troops from Fort Defiance launched another expedition against the Indians. The latest confrontation between the races had been touched off by the circumstances involving the death of Major Brook's black servant who had died at the post in a scuffle with a Navajo. The Navajos justified the act claiming the servant had molested a Navajo woman, an act punishable by death according to Navajo code of ethics. When the Navajos refused to handover

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the offender, Col. Thomas "Little Lord" Fauntleroy ordered retribution. Fauntleroy targeted Manuelito's village for retaliation. Although the army succeeded in surprising the village, Manuelito escaped the snare. The military remained active through December, but the net results were minimal. Fifty Indians were purportedly slain, and the military orchestrated another worthless treaty with the Navajos.

Meanwhile, the New Mexico Territorial Legislature became impatient with the scenario. Navajo assaults continued, while the regular army seemed hapless to prevent the attacks or retaliate in kind. A public outcry for formation of militia to deal with the Indian menace grew proportionately larger. Army officials worried over a war to exterminate the Indians. On April 30, 1860, violence shattered the cool morning at Fort Defiance. Estimates of one thousand or more Navajos under the combined leadership of Manuelito and Barboncito spearheaded an assault on the hated fort, making it one of the few recorded incidences in the history of the Indian Wars in which Indians attacked a fort. The strike nearly succeeded in overrunning the garrison before being repulsed. So audacious were Navajo forays that one came within eight miles of Santa Fe. Colonel Fauntleroy and Maj. Edward R. S. Canby cooperated in an operation to trap the Navajos, but they failed in their mission.

This latest chapter in the Army's ineptitude prompted New Mexico's citizens to raise militia. Without waiting for official sanction from Governor Abraham Rencher, New Mexicans organized a volunteer battalion of five companies. They marched into Navajo country bent on destroying any Indians they encountered. The militia killed and murdered; livestock was destroyed or run off; and women and children taken as prisoners of war. The brutality ended only when the militia depleted their supply of ammunition. Despite taking matters into their own hands, the harsh civilian techniques did produce an immediate if not long-lasting impact, an armistice.

But peace was fleeting. The approaching storm of sectional differences exploded in April 1861, influencing even far-off New Mexico. Federal officials reacted swiftly. Regular U.S. Army troops would have to be withdrawn from most of New Mexico's garrisons. Some of the soldiers went East to join Union armies to fight the Confederates. In addition, a Confederate threat to New Mexico, emanating from the west Texas town of El Paso, forced officials to scatter the remaining regular forces along the Rio Grande corridor, the natural route of any Confederate invasion. The second concern was to find a suitable commander for the remaining regular forces in New Mexico. In June 1861, Major Edward R.S. Canby was promoted to the rank of colonel and given the responsibility for New Mexico's defenses. A veteran officer, Canby had served in Florida during the second Seminole War, the Mexican War with Bvt. Lt. Gen. Winfield Scott Hancock, and possessed extensive experience in the Southwest. Canby manifested a mild dignified manner. He preferred civilian attire over the regulation army blouse, his "prudent" appearance highlighted by a cigar habitually placed in his mouth, although seldom lit. When he did smoke, he selected a pipe.2 Prior to the appointment of Canby, Federal officers began the concentration of troops in the Rio Grande valley and southern New Mexico. In April Fort Defiance was abandoned. That left one post to protect west central New Mexico from Navajo attack--Fort Fauntleroy.

Authorized on August 31, 1860, Fort Fauntleroy's primary purpose focused on combating Navajo depredations. The garrison stood approximately 50 miles southeast of Fort Defiance and about 35 miles west of the malpais. Its location at Bear Spring, a popular stopover and

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gathering place for the Navajos, had been the site of Colonel Doniphan's treaty of 1846 with the Navajos. The post played host to a second treaty signing in early 1861, following the inconclusive campaign of Fauntleroy and Canby to entrap the Navajo. For the time being, Fort Fauntleroy remained an active post. Its fate hinged on the activities of Confederates in Texas. Meanwhile, following the exodus of Regular troops, New Mexico volunteers filled the void at Fauntleroy. Companies A, B, and C of the 2nd Regiment, New Mexico Volunteers, garrisoned the post after April 1861.3

On ration day, September 22, 1861, Navajos assembled at Fort Fauntleroy to receive their monthly food allotments, an inducement employed by the federals to keep the Navajos from raiding. As customary practice, a series of horse races between Navajos and soldiers developed. The seemingly harmless races became the catalyst for tragedy. In the grand finale, the Navajo rider lost the contest but immediately lodged a protest that the American rider had committed a foul. The Navajos declared someone had severed the reins to the Indian horse, thereby causing their jockey to lose control of his mount. Since wagers were heavy, the unsympathetic soldiers declined a re-run, foul play or not. Angry Navajos stormed the fort. A nervous sentry fired on an Indian at point-blank range. To complete the melee, the military brought out its howitzers to shell any Indians in range. When the dust cleared 12 Navajos lay dead or dying, and another 40 suffered from various wounds. The casualties included a Navajo woman and her two small children.4

When Col. Canby learned of the incident, neither he, and the civilian population exhibited any remorse. In fact, Canby perceived the unfortunate debacle at Fauntleroy as appropriate medicine to deter the Navajos from further raiding. It did not. If anything, it instilled in the Navajos a deep and bitter resentment towards the New Mexicans, fueling the flames of aggression. To the Navajos, the death of their kinfolks served to strengthen their perceptions of New Mexicans as deceitful and treacherous.

Because of a Confederate threat to the Rio Grande Valley, Canby in September 1861, abandoned Fort Fauntleroy leaving no military installations in west central New Mexico. He transported quartermaster stores to Cubero and housed them in rented buildings for safekeeping. Four Confederate sympathizers quickly seized the tiny garrison at Cubero and sent the supplies to Confederate authorities.5 The Navajos interpreted the withdrawal of troops as an omen of having sapped the fighting spirit of the military. Coinciding with the receding blue troops, came the resumption of Indian strikes on villages, ranches, and mines. A frustrated Canby headquartered at Fort Craig remained powerless to halt them, for he had no available forces. In the first few months of 1862, he was committed to defending New Mexico from Confederate takeover. Defense of New Mexico frontier fell to local militia units. Not until Confederate defeat at Glorieta Pass in March 1862, could Canby redirect his efforts to blunting Indian attacks permeating the State at every corner.

With the retreat of the Confederates into Texas, Canby returned to Santa Fe where he established headquarters in May 1862. Canby used the next few months to organize his defenses to cover the entire territory, and he devoted time to putting administrative affairs in order. Finally, in August 1862, Canby declared himself ready for a renewal against Navajo

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incursions. Canby formalized a campaign to both protect and punish the Navajos. New forts would be constructed in Navajo country to supplant the defunct posts. Writing Washington on the subject, Canby outlined a stratagem for Indian self-preservation. He perceived a reservation system far removed from population centers of the Territory as the only viable means of preventing the extermination of the native Tribes. In September, he prepared for an expedition against the Navajo. However, the closure of Forts Defiance and Fauntleroy left Canby with no base of operations in western New Mexico. To remedy the problem, Canby received authorization to erect a new garrison in west-central New Mexico to take the place of the defunct posts. The tentative site selected for the new post favored the western edge of the malpais at Ojo del Gallo. The garrison was to be named Fort Wingate, in honor of Bvt. Maj. Benjamin Wingate, 5th U.S. Infantry. Wingate, a Hoosier, received debilitating wounds to his legs during the battle of Valverde, February 21, 1862. Both legs required amputation. Complications from shock and blood poisoning set in, and the infantry captain succumbed on June 1.

But Canby never implemented his Navajo removal policy or see the construction of Ft. Wingate. Brig. Gen. James H. Carleton commander of the California volunteers became the new departmental commander in New Mexico in September 1862. Like his predecessor, Canby, Carleton possessed extensive Indian experiences. Born in Maine, December 27, 1814, he served in the militia during the Aroostock War of 1838. His experience in the Aroostock campaign led Carleton to pursue a military career. In 1839, he was appointed a second lieutenant in the 1st Dragoons. He followed his fortunes to Mexico serving as aide to Maj. Gen. John Wool. At Buena Vista Carleton received a brevet for gallantry. Following the Mexican War, Carleton's company returned to Arizona, but Carleton remained in the East to study and correlate European cavalry tactics. In 1861 Carleton received promotion to Major of the 6th Cavalry. At the outbreak of the Civil War, Carleton took leave of the regular army to become colonel of the 1st California Infantry Volunteers, an appointment influenced by Carleton's mentor and close friend, Maj. Gen. Edwin Sumner. Sumner ordered Carleton "to retake Arizona and New Mexico." Autocratic, tyrannical, and sometimes a harsh disciplinarian, he was not a man to be trifled with.

Upon arrival in Santa Fe, the vigorous Carleton immediately proceeded to take measures to curb the Indian depredations in New Mexico. Carleton adhered to much of his predecessor's philosophy for dealing with the Navajos such as the placement of Navajos on a reservation, far removed and isolated from any population center. Whereas Canby formulated the fate of the Navajos, Carleton enforced the plan with devastating consequences for the Navajos.
Carleton upheld Canby's design for building Fort Wingate, citing its strategic location situated where soldiers could "perform such services among the Navajos as will bring them to feel that they have been doing wrong." Captain Henry R. Selden headed a board of officers to pinpoint the site for the post. Based on Selden's recommendations, the lava-filled Ojo del Gallo valley was chosen. Two prime considerations favored the malpais location. The Ojo del Gallo valley afforded excellent pasturage. In addition, its position, astride an intersection that blanketed the approaches of two major highways—the old military road to Fort Defiance and the Spanish highway to Zuni Pueblo—provided control and access in which to block or pursue an adversary.

Captain Henry Selden in command of Companies D and G of the 1st U. S. Cavalry, formerly the 1st Dragoons, first occupied the site. In late October, however, an aggregate of 11 officers and 317 enlisted men of the 1st New Mexico Cavalry Volunteers reached Fort Wingate to initiate their long association at the malpais garrison. The establishment of Fort Wingate dates officially from October 22, 1862, by Special Orders No. 176, Headquarters Department of New Mexico September 27, 1862. Canby never witnessed the completion of Fort Wingate. His replacement arrived on September 18, 1862.

The post's new commander, Lt. Col. Jose Francisco Chavez, assumed command of four companies of the 1st New Mexico Volunteers, Companies B, C, E and F. The majority of the officers and enlisted personnel were of Hispanic origin. With an obvious ethnocentric viewpoint, General Canby had issued orders to keep the companies in his department segregated with the exception of the New Mexico units. In the New Mexico companies, Canby required at least one officer and a quarter of the non-commissioned staff to be bilingual. The appointment of Chavez to command at Wingate was indeed fortuitous. He ranked as one of New Mexico's favorite sons and was stepson to Governor Henry Connelly. Born in Bernallilo County in 1833, Chavez attended schools at St. Louis University and later spent two years at the College of Physicians and Surgeons in New York City. Prior to the Civil War he engaged in expanding the sheep industry. A staunch Unionist, he joined the 1st New Mexico Volunteers with the rank of major. When Ceran St. Vrain resigned as colonel of the 1st New Mexico, Christopher Carson became the regiment's colonel and Chavez elevated to the lieutenant colonelcy slot.

In constructing the perimeter of the post, approved designs dictated the fort's dissection at right angles and along the cardinal points for added protection against attacks. A large open

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12 Bailey. The Long Walk. 149.


14 Fort Wingate, N.M. (1862-1914). Record Group 393. Records of the United States Army Commands, National Archives.

15 Fort Wingate Post Returns. October 1862. National Archives and Records Service. Microfilm Copy Roll 1448, roll 1, RG 94; Copy used is from Corona Room. University of New Mexico; Carleton to Chavez. September 28, 1862. LS, Dept. NM, M-1072, roll 3, RG 393.


space was reserved between officer’s quarters and company quarters forming an imposing parade ground. Sycamore trees were planted around the edge of the parade ground offering a shaded and symmetrically pleasing atmosphere to the company street.\textsuperscript{18}

Chavez’s first order of business at Fort Wingate, per instructions from General Carleton was the preparation of shelter for the sick followed in priority order by the construction of buildings to house stores, animals, and then the men.\textsuperscript{19} Although construction progressed at a furious pace, the post would never be fully completed due to incessant demands for scouting missions against Navajos and the fort’s poor site. Built on top of a swampy plain with groundwater only two feet below the surface, the fort had major structural problems. The alkaline water extracted a heavy toll on the adobe walls reducing them in short order to a spongy, decaying mess. Officers complained that they spent more time repairing the structures than they did building them.\textsuperscript{20} Because of the urgency for shelter, most of the buildings were built in quick and shoddy fashion. Many structures were substandard or never finished. As late as 1864 the post hospital, officers quarters, and guardhouse were incomplete. The quartermaster storehouse had a dirt floor. Enlisted men were still being sheltered in tents, which habitually fell down in heavy winds.\textsuperscript{21}

The indefatigable Col. Chavez devoted energy and time to constructing shelter, a task made difficult with the onset of winter only weeks away. On November 7, he wrote Capt. Ben Cutler, Assistant Adjutant General in Santa Fe, that a garrison work detail had nearly completed a 2,000-yard irrigation ditch connecting Fort Wingate to the springs at Ojo del Gallo. Other soldiers, Chavez wrote, were dispatched to the nearby Zuni Mountains to fell timber for use in erecting storehouses and corrals. As a footnote Chavez added, “but I am afraid that we will not be able to have everything under shelter before cold weather on account of the small amount of transportation now at this post.”\textsuperscript{22}

Chavez’s fears were no exaggeration. Capt. Julius C. Shaw described Wingate in a letter of December 1862 that was printed in the March 13, 1863, San Francisco Alta California: “The fort looks vastly fine on paper, but as yet it has no other existence. The garrison consists of four companies of my regiment--The Fourth New Mexico Mounted Rifles--and we live on, or rather exist, in holes or excavations, made in the earth, over which our cloth tents are pitched. We are supplied also with fire places, chimneys, etc., and on the whole, during the beautiful pleasant weather of the past few weeks, have enjoyed ourselves quite well. Our camp presents more appearance of a gypsy encampment than anything else I can compare it to.”\textsuperscript{23}

\textsuperscript{18}Rio Abajo Weekly Press (New Mexico). June 23, 1863.

\textsuperscript{19}Carleton to Chavez. October 12, 1862. LS, Dept NM. M-1072. roll 3. RG-393.


\textsuperscript{21}Miller. Soldiers and Settlers. 227.

\textsuperscript{22}Chavez to AAG. November 7, 1862. LR, Dept NM. M-1072. roll 25. RG 393.

\textsuperscript{23}San Francisco Alta California. March 13, 1863. Shaw commanded Company F. 1st New Mexico Volunteers.
To expedite construction, Chavez sent fatigue parties to cannibalize razed Fort Lyon and retrieve all salvageable materials. Unlike most western frontier military forts, which never built wooden stockades to surround the post, Fort Wingate did. Plans called for a stockade 4,340 feet long and 8 feet high. More than one million feet of lumber went into its construction. In addition to the timber, 9,317 feet of adobe walls, one foot thick and eight feet high were required. Lieutenant Allen L. Anderson, 5th Infantry and Acting Engineer Officer, commented that $45,000 in appropriations would be required to construct the post, a cost figure approved by Washington. While Col. Chavez hastened to build the post, he did not ignore his objective--the Navajos. In an effort to differentiate friendly Navajos from those disposed to be unfriendly to the government, Chavez sent notices inviting the Indians to Fort Wingate. It came to no one's surprise that few accepted his invitation.

Meanwhile, General Carleton set into motion his Indian relocation plan for the Navajos and Mescaleros Apaches. The Bosque Redondo at Fort Sumner became the designated collecting point and permanent home for both tribes. "The purpose I have in view," wrote Carleton, "is to send all captured Navajos and Apaches to that point [Bosque Redondo], and there to feed and take care of them until they have opened farms and became able to support themselves, as the Pueblo Indians of New Mexico are doing. Removal should be the "sine qua non" of peace."

By the fall of 1862, Navajos began to reflect concern with the military buildup at Fort Wingate. A Navajo delegation journeyed to Santa Fe in December to discuss a peace proposal. A stern Carleton informed the 18 assembled Indians, including war chiefs Delgadito and Barboncito, that "they could have no peace until they would give other guarantees than their word that the peace should be kept." Unless the Navajos accepted peace on unconditional terms of the U.S. Government, a war of attrition was eminent. The Navajos were noncommittal but not intimidated by white man's talk.

While Carleton warned the Navajos of their impending fate, Col. Chavez stockpiled mountains of supplies at Fort Wingate for a spring campaign. In February 1863, Chavez and the New Mexico Volunteers underwent their baptismal of fire against the Navajos. An undetermined number of Navajos disrupted mundane post routines when they breached the corral and stole four horses. A punitive expedition sent after the perpetrators failed to apprehend the horse thieves. Occurring at the same time as the horse raid, Indians ambushed and killed four

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26 Carleton to Brig. Gen. Joseph R. West commanding District of Arizona, LS. Dept NM, M-1072, roll 3, RG 393; Anderson to Carleton, November 16, 1862, LR. Dept NM, M-1120, roll 15, RG 393; Miller, *Soldiers and Settlers*, 226.

27 Chavez to Assistant Adjutant General, Department of New Mexico, November 7, 1862, LR. Dept NM, M-1072, roll 25, RG 393.


29 Reeve, *New Mexico Historical Review*, 248.

30 Ironically, the horses were recaptured by Navajos friendly to the Army and were guided to Jemez Springs and left there for safekeeping. Chavez to AAG, March 1, 1863, LR. Dept NM, M-1072, roll 18, RG 393.
Figure 1. Fort Wingate Environs, taken from territorial map of New Mexico, 1867. Courtesy Museum of New Mexico, Neg. No. 142599.
Mexicans and one friendly Navajo on the Cebolleta and Cubero road east of Fort Wingate. The assailants escaped.

The ill-tempered Carleton fumed at Chavez's report that outlined the horse stealing sortie. Carleton fired a stinging reprimand to Chavez ordering him to seize 20 men and their families, and hold them for hostages until the horses were returned. He finished his missive with, "what Col Chavez does he must with a strong firm hand. Child's play with the Navajo must stop henceforth."³¹

In April General Carleton inspected Fort Wingate. He divulged to Chavez his plans for the ultimate fate of the Navajos. Peaceful factions would be transferred to Bosque Redondo. Truculent parties would be hunted down and killed if they resisted removal. About May 1 at the village of Cubero, Carleton and Lt. Col. Chavez again conferred with Navajo statesmen willing to listen to the white men. Indian dignitaries included Degadito and Barboncito. Carleton explained the options to the attentive warriors. It was not what they wanted to hear. Barboncito denounced the proposal, declaring he would neither go to eastern New Mexico nor fight. Writing on the episode, Col. Chavez quipped, "When it comes to the pinch he will fight run or go to Bosque Redondo."³²

To combat the Navajos, Chavez mustered less than 300 soldiers with only one mounted company.³³ As spring turned to summer, Indian harassments near the malpais post escalated. On June 24, Navajos repeated their penetration of the horse corral, this time absconding with three head of oxen and driving off some horses. Chavez directed Capt. Chacon to recover the stolen stock and punish the marauders. Chacon with twenty-two men tracked the offenders up the old Fort Defiance Road. On the 28th he overtook the rear of the Navajos. Mounting a charge, the New Mexico Volunteers scattered the surprised warriors and recaptured four horses and a mule.³⁴

While Fort Wingate troops parried with the Navajos, General Carleton declared himself ready to take the fight to the Navajos. And the General meant business. Messages were transmitted to Fort Wingate, informing Col. Chavez to reopen communications with the Navajos. Carleton admonished his subordinate to instruct the chiefs they had until July 20 to surrender or face dire military consequences.³⁵ On July 7, Barboncito, Delgadito, and Sarracino conferred with Chavez. The colonel acquainted the chiefs with the ultimatum. Barboncito, the spokesperson, appealed to Chavez that the chiefs desired peace but did not wish to move to Bosque Redondo. The meeting expired with the chiefs remaining non-committal concerning surrender or removal.

No one in the army hierarchy seriously entertained thoughts of Navajo capitulation. At the head of the list stood General Carleton. Even before the July 20th deadline, he set into motion a summer campaign to break Navajo resistance. On July 7, the aggressive Colonel Carson left

³¹Carleton to Chavez, March 6, 1863. LS, Dept NM, M-1072, roll 18, RG 393.


³⁵Keleher, Turmoil in New Mexico, 303.
Los Pinos, situated 20 miles south of Albuquerque, with a detachment of 750 soldiers and Indian auxiliaries. Marching rapidly, Carson reached Fort Wingate on July 10. The fort resembled a beehive as soldiers prepared for field service. A mountain of quartermaster supplies foretold Fort Wingate’s importance as a supply depot in the ensuing months.

Carson lingered but four days at Fort Wingate before striking out to re-establish a fort in the heart of Navajo country. Carson converted the blackened rubble of former Fort Defiance into headquarters and dubbed the new site, Fort Canby. Unleashing 200 Ute scouts, Carson sent them forward in search of their old nemesis. The Navajos managed to avoid collision with the Utes and the troops but their peach orchards, fields of ripening corn, and their livestock fell to the despoilers.

While Carson’s forces perfected a systematic destruction of Navajoland, Fort Wingate’s soldiers remained alert. Given the prevailing attitudes of the period, the predominantly Hispanic New Mexico Volunteers and the almost exclusive Anglos comprising the California column, existed in racial harmony while serving together at Fort Wingate. Captain Chacon recalled in his memoirs that relations with the California troops were always cordial. Whatever their ethnic differences, the two cultures found commonality in that they were Volunteers and hence were considered inferior to Regular troops. Moreover, they bonded together in a common cause--a desire to hunt down and kill, if necessary, all Navajos who did not adhere to General Carleton’s Bosque Redondo plan. In an effort to harass and wear down the Navajos, scouting and reconnoitering parties flooded the region. On July 30, 1863, Major Edward B. Willis departed Fort Wingate with Company C, 1st California Volunteers, one of two California companies temporarily assigned to the post, and Company F, 1st New Mexico Cavalry. Willis’ scout, which carried him into Arizona, flushed no Indians but did serve Carleton by forcing the Indians to move their camps.

In August Capt. Rafael Chacon spearheaded another grueling reconnaissance. The New Mexicans overtook a party of Navajos near the Salt Lakes, south of Zuni Pueblo. Chacon dispersed the Indians, killing two warriors and capturing ten women and children. On August 28 his detachment pummeled another Navajo encampment. In a dawn attack, the New Mexicans scattered the village capturing 60 women and children, 6,000 sheep, and 30 horses.

While Chacon chased Indians across of New Mexico and Arizona, the Navajos initiated a surreptitious visit to the malpais. On August 31, Navajos assailed a wagon train five miles from the post. The celerity of the assault succeeded in wounding one man and forcing the soldiers to relinquish their wagons to the jubilant warriors. On September 16 the Indians struck again, this time stampeding Capt. Chacon’s horses grazing five miles from the post.

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36 Hunt, Major General James Henry Carleton, 276.
37 Darlis A. Miller, The California Column in New Mexico (Albuquerque: University of New Mexico Press, 1982), 5-6.
38 Canby had been critical of the New Mexico Volunteers following the battle of Valverde, accusing them of running from the battlefield. Chacon, Legacy of Honor, 240.
39 Chacon to Assistant Adjutant General, August 11, 1863, LR, Dept NM, M-1072, roll 18, RG 393.
40 Chacon, Legacy of Honor, 228-231; Chacon’s memoirs provide excellent details while stationed at Fort Wingate. See chapter “Fort Wingate,” 221-244.
41 Chavez to Assistant Adjutant General, September 2, 1863, LR, Dept NM, M-1072, roll 18, RG 393.
Colonel Chavez gave pursuit but halted after an abortive 30 mile chase. The nettlesome assaults on Fort Wingate persisted, serving to infuriate Carleton and drive a wedge of discord between him and Colonel Chavez. Relations deteriorated in a litany of angry messages from Carleton. A proud Chavez, stung by the criticism, searched for relief from the tyrannical Carleton. Probably using influence with his step-father, Governor Henry Connelly, Chavez garnered an assignment away from Fort Wingate and the martinet, Carleton. In December, he headed a battalion of Missouri and New Mexico Volunteers escorting the newly appointed Governor of Arizona Territory to Fort Whipple.

Meanwhile, Forts Canby and Wingate were converted into temporary detention centers before sending prisoners to Fort Sumner. On October 21, a contingent of warriors converged on Fort Wingate for the purpose of demonstrating peaceful overtures. Again, the military response to the peace proposal remained uncompromising—"All must come in and go to the Bosque Redondo, or remain in their own country at war." In November Delgadito's destitute band became the first major Navajo faction to surrender when he and 187 followers traveled to Fort Wingate. Under military escort, Delgadito's group made the long trek to Fort Sumner.

But it remained to Carleton's chief war architect, Col. Carson, to strike a decisive blow against the Navajos. In January 1864, Carson took dead aim at that bastion of Navajo citadels—Canyon de Chelly. The expedition succeeded in destroying valuable Navajos supplies. Stunned by Carson's hammer blows, the Navajos faced two unpleasant alternatives—surrender and become wards of the Army, or retreat farther into the abyss of their vast domain and subsist off nature's meager bounty of pinon nuts and wild potatoes. Danger impaled the latter course. If the army did not find them, then the Utes or Puebloans might. Realizing the futility of resistance, many Navajos yielded to the dictates of the government. The remaining Indians, their will unbent, determined to resist until the bitter end.

On February 1, 1864, 800 half-starved and half-frozen Navajos congregated outside Fort Canby, awaiting transportation to Fort Sumner. The scenario duplicated itself the next day at Fort Wingate, where a ragtag group of 680 Navajos assembled. By March 1, the ranks of homeless Navajos mushroomed to 2,500. The Santa Fe Gazette gleefully revealed, "There are now about 1600 Indians here, and perhaps an equal number on their way to Fort Wingate so that the rate they arrive daily we will in less than three weeks have about five thousand on the reservation."

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42Chavez to Carleton, September 23, 1863. LR. Dept NM. M-1072. roll 18. RG 393.

43Kelehcr, Turmoil in New Mexico, fn. 487-488;

44The clash of military and political opinions between General Carleton and Colonel Chavez continued and finally impaled their relationship. Chavez resigned his commission. Afterwards, he entered the political arena serving as New Mexico's Congressional Delegate to the 40th and 41st Congress. New Mexicans so valued his political skills that they elected him to eight terms to New Mexico's state legislature. J. Francisco Chavez Papers. Hayden File. Arizona Historical Society: Bailey. The Long Walk. 335;


46Thompson. The Army and the Navajo. 22.


48Bailey. The Long Walk. 164.
On March 4, a pitiful band of 2,000 Indians departed Fort Canby on their “long walk” to Bosque Redondo. The young, the aged, and the infirmed rode in wagons, while the healthy trailed beside. Most were ill-clad, many exhibited symptoms of malnutrition. Some succumbed to exhaustion but most died from dysentery attributed to poor preparation of flour. The army issued flour but failed to provide cooking instructions. Many Navajos devoured the flour raw or mixed water with it to form a paste or gruel; still other Indians, poorly clad, died enroute from exposure to a chilling March cold. Their trail was easily identified by the number of corpses that lined the road between Forts Canby, Wingate and Sumner. One hundred and twenty-six perished.\(^{49}\)

The human suffering only worsened in the succeeding weeks. Captain Francis McCabe of the 1st New Mexico Cavalry Volunteers left Fort Canby on March 20 in charge of another Navajo caravan bound for Fort Sumner. Snowstorms pelted the column making travel miserable. Reaching Fort Wingate, McCabe grimaced when he discerned that headquarters had not forwarded sufficient food or blankets for his pathetic captives.

The unexpected surrender of so many Indians at one time caught General Carleton and Fort Wingate off balance and in an embarrassing situation. Carleton instructed Fort Wingate to “place all troops on half rations.” The Indians too were placed on half rations. When another 146 hungry Navajos showed up, rations were again reduced. McCabe finished his trek to Fort Sumner but not without tragedy and human suffering. In his report, McCabe revealed that 110 Indians died enroute, another 25 escaped. He noted that many Indians had departed Fort Canby without benefit of warm clothing. Blankets were not issued until the column reached Los Pinos on the Rio Grande.\(^{50}\) The demise of the haughty Navajos caused New Mexicans to rejoice enthusiastically. Governor Connelly proclaimed the first Thursday in April as a day of prayer and thanksgiving. He honored General Carleton and his troops for their successful campaign. Santa Fe church bells rang gloriously in the wake of Navajo misery.

In the spring and summer of 1864, Navajos surrendered in droves. At Fort Wingate, the new post commander Maj. Ethan W. Eaton spent much of his time processing Navajos for shipment to Fort Sumner. Vigilance, however, could not be relaxed. Manuelito’s band remained defiant. Eaton maintained patrols, scouring the territory in search of the recalcitrant warrior.

During the summer, the hard-driving Carson continued to lay waste to the Navajo homelands. Returning to Canyon de Chelly, Carson’s pyrotechnics razed the ripening orchards and fields of crops, which tightened the strangulation hold on the Navajos. As summer turned to autumn, more Navajos joined their relatives at Bosque Redondo.

In October, Major Eaton reported the surrender of 1,000 Navajos at Fort Wingate, additional evidence of the effectiveness of Carson’s sacking of Canyon de Chelly and the Fort Wingate patrols. With the advent of cold weather, Fort Wingate troops settled into a winter routine. Garrison life focused on the mundane chores of escorting military supply wagons to and from Fort Canby, assisting in never-ending construction activities, and superintending to the needs of the Navajos who continued to dribble into the fort. But even the cold brace of winter did

\(^{49}\)Ibid.

not eliminate Fort Wingate troops from campaigning. On January 2, 1865, a detachment under Lt. Jose Sanchez left their creature comforts to punish sheep-stealing Indians. The column found no Indians but did blunder into a raging snowstorm near the Datil Mountains, which obliterated all traces of the marauders. Sanchez returned to the post empty-handed, reporting that his command subsisted for three days on nothing more than boiled wheat. Although they did not encounter Indians, their presence forced the Navajos who were already in a weakened condition to move their camps.\(^{51}\)

To induce Manuelito's band, which represented the largest remaining contingent of Navajos opposing exodus to Bosque Redondo to surrender, General Carleton sent three Navajos to Fort Wingate for the purpose of establishing communications with the proud warrior. Near Zuni they made contact with Manuelito's camp. Despite persuasion, Manuelito remained unyielding. While he would not go to Bosque Redondo, some of his followers postulated a different viewpoint. The peace emissary returned to Fort Wingate and presented their findings. They reported that about 350 Navajos remained at large.\(^{52}\)

During the winter, small groups of Navajos continued to migrate to Fort Wingate. Some endeavored to establish their camp about a mile from the post as a sign of friendliness towards the government and thus hoping their actions would sway the army to allow them to settle near the post. When Major Ethan Eaton learned of their presence he informed them they must go to Bosque Redondo--no exceptions, regardless of their peaceful intentions.\(^{53}\) Rather than risk the uncertainty of eastern New Mexico, the Navajos bolted electing to take their chances on the run. After discovering the Navajos had jumped, an angry Major Eaton instructed Capt. Donaciano Montoya to take 25 men from Companies B and F of the 1st New Mexico Cavalry, who were all dismounted, and track down the runaways. Eaton admonished Montoya, "If they refuse to return and resisted, to bring them in by force--If they fought, to kill all he could. Women and children to be spared as much as possible." Montoya's foot cavalry languished on the trail in a snowstorm managing to overhaul just two women and a child. Soldiers killed one warrior who lingered to rescue the family.\(^{54}\)

Meanwhile, the Hispanic communities of Cubero, San Mateo, and Cebolleta located north and east of Fort Wingate, came under repeated assaults by Navajo bands. Predominantly poor, the villagers nevertheless, accumulated large herds of sheep and other livestock, which were routinely relinquished to raiding Navajos who had never gone to Bosque Redondo, or Indians returning from Bosque Redondo. Caught in the middle, the villagers sought retribution.

In May, Antonio Mexicano and citizens of Cubero paid a visit to Fort Wingate complaining of loss of livestock. With so few troops available for patrols, and the lack of serviceable horses, Maj. Eaton could offer little assistance. Mexicano proposed that Cuberoans assemble a citizen-armed force and hunt down the marauding bands who pillaged the countryside. The military normally held citizen-formed armies in low esteem, due to their excess in killing and plundering. New Fort Wingate commander, Lt. Col. Julius Shaw, endorsed the concept and


\(^{52}\)Lt. John Ayers to Departmental Headquarters. March 20, 1865. LR. Dept NM, roll 2. RG 98.

\(^{53}\)Eaton to AAG. Feb. 13, 1865. LR. Dept NM, roll 2. RG 98.

\(^{54}\)Report of Captain Donaciano Montoya to AAG. February 13, 1865. LR. Dept NM, roll 2. RG 98.
forwarded the plan to Santa Fe. General Carleton realized that his Volunteers alone could not finish the job, and he too, perceived the citizen army as a means of breaking Navajo spirit.

Mexicano's contingent joined with 75 Zunis to form a formidable command. Returning to Fort Wingate May 25, Mexicano boasted a successful campaign. In less than 10 days the Cubero-Zuni column, claimed Mexicano, killed 21 Navajos and captured 5 women in a fight 9 miles from Zuni. To back his brag, Mexicano displayed 16 pairs of ears but did not elaborate from what age or gender his grisly trophies originated. On the same day that Col. Shaw learned the details of Mexicano's expedition, Navajos assaulted a timber camp just 6 miles from the post wounding one teamster. A military escort drove off the assailants. Colonel Shaw, a strong supporter of the use of civilian columns in repelling attacks, sent a dispatch to General Carleton justifying the employment of civilians to hunt down the Navajos. Shaw grumped that incessant scouting missions reduced his effective force to a mere 69 privates and 35 serviceable horses.

In June the energetic Mexicano returned to the field. On July 10 Shaw reported to Carleton that approximately 50 Hispanics under the direction of Mexicano attacked Manuelito's camp 75 miles southwest of Fort Canby. Although Manuelito escaped, the command captured 18 horses plus all camp impedimenta. Pleased with Mexicano's progress, Shaw informed Carleton that if the military would provide ammunition and food at cost to the citizens, that the communities of Cebolleta and Acoma would place more men in the field.

With army endorsement, civilian raiding parties escalated. In June Juan Vigil led fellow Abiquiu citizens on an expedition that penetrated Arizona. Vigil's party fought several running engagements with the Navajos reporting the death of 9 Indians and capturing 85 while losing two men. His force recovered a thousand head of horses and sheep, which they commandeered for themselves but promptly lost to a Navajo counterattack. In August Shaw announced another non-military success. Zunis collided with Navajos near that pueblo. In the ensuing fight, Zunis killed four and captured seven while losing only one warrior.

Compared to the citizen expeditions, Shaw's troops remained impotent. Two August missions led by Captains Montoya and Nicholas Hodt proved dismal. Montoya tracked Navajos toward Canyon de Chelly but netted only 4 women captives. Captain Hodt's scout drifted to the

55 Lt. Col. Julius Shaw to AAG, May 25, 1865, L.R. Dept NM, roll 2, RG 98; See also Shaw to AAG, November 11, 1865, L.S. Dept NM, roll 2, RG 98.
56 Shaw to AAG, May 25, 1865, L.R. Dept NM, roll 2, RG 98. The timber guard consisted of one corporal and six privates from Companies B and F, 1st New Mexico Cavalry Volunteers.
57 Shaw to AAG, June 20, 1865, L.S. Dept NM, roll 2, RG 98; Shaw to AAG, June 23, 1865, L.S. Dept NM, roll 2, RG 98.
58 Shaw to AAG, July 10, 1865, L.R. Dept NM, roll 2, RG 98.
59 Shaw to AAG, July 24, 1865, L.R. Dept NM, roll 2, RG 98.
60 Shaw to AAG, August 8, 1865, L.R. Dept NM, roll 2, RG 98.
61 Report of Captain Montoya to AAG, August 22, 1865, L.R. Dept NM, roll 2, RG 98.
southwest in search of Indians fleeing from Bosque Redondo. In a grueling march, Hodt trekked 401 miles but found no one.\textsuperscript{62}

Despite the increased military and citizen forays, Navajo incursions persisted and intensified in the Ojo del Gallo region, probably in retaliation for the citizen raids, which enslaved some of their people. In October Indians ambushed a party of soldiers providing escort for the mail 7 miles from Fort Wingate. The soldiers managed to return safely to the fort but citizen Manuel Martin was not as lucky. Martin fell in a rain of arrows and lead. Although severely wounded, he held off his attackers and was brought to the fort. In conjunction with the mail attack, Indians assaulted a civilian couple on the Cubero road, killing the woman and wounding the man.\textsuperscript{63}

So persistent were the Navajo thrusts that Ramon Baca, Justice of the Peace for San Mateo, petitioned Col. Shaw to detach 20-25 soldiers to protect the settlement from numerous gangs of Navajos who robbed and murdered.\textsuperscript{64} Shaw declined, stating he could not spare the men. He suggested that the citizens form another private expedition to punish the Navajos promising to provide a thousand rounds of ammunition.\textsuperscript{65} The citizens accepted Shaw's offer and promptly elected the venerable Antonio Mexicano to head the expedition. With most of San Mateo's eligible males away on campaign, Carleton ordered Col. Shaw to station troops at San Mateo to protect women and property. Lt. John Feary and 11 men were detached to San Mateo for 60 days if needed. Local citizens provided quarters for the men.\textsuperscript{66}

Based on the success of San Mateo citizens in receiving military aid against Navajo attacks, a delegation from Cubero on March 8 delivered at Fort Wingate a signed petition seeking assistance. The petition enumerated depredations committed on the citizenry between February 1 and March 6. In that span, Navajos lifted more than 2,200 head of livestock and killed and wounded one herder.\textsuperscript{67} A sympathetic Shaw declined for he simply did not have any extra troops.

Two weeks later Carleton received a report from Fort Wingate detailing another attack on troopers escorting the mail. This time the expressmen were not so fortunate. Three soldiers fell in the assault, the fourth was missing but later turned up unharmed at Cubero.\textsuperscript{68} The new post commander, Capt. Edmund Butler of the 5th United States Infantry, could spare only ten men under Capt. Hodt to give pursuit because other columns were already in the field--reconnaissances to Canyon de Chelly and Datil Mountains. Hodt's small punitive force pressed the Indians. On the fourth day, Hodt surprised the warriors, killing 1 and wounding several. That these Indians were responsible for the expressmen killings, Hodt found evidence in the camp a horse belonging to one of the dead troopers. He noted that most of the Indians

\begin{footnotes}

\textsuperscript{63} Shaw to AAG. October 17, 1865. \textit{LR, Dept NM}, roll 2. RG 98.


\textsuperscript{65} Shaw to Baca. Nov. 12, 1865. \textit{LR, Dept NM}, roll 1. RG 98.

\textsuperscript{66} Carleton to Commanding Officer Fort Wingate. \textit{LS, Dept NM}, M-1072, roll 3. RG 393.

\textsuperscript{67} Citizens of Cubero Petition to General Carleton. March 8, 1866. \textit{LR, Dept NM}, roll 2. RG 98.

\textsuperscript{68} Captain Edmund Butler to AAG. March 24, 1866. \textit{LR, Dist NM}, roll 3. RG 98.
\end{footnotes}
Chapter V

appeared to be Apaches, not Navajos. Hodt pursued the Indians toward Sierra Blanca but turned back because of worn-out horses.69

Expeditions from Fort Wingate increased after the death of the expressmen but proved largely ineffective owing to the vastness of the territory and the guerrilla-like tactics of the Navajos and Apaches. Nevertheless, Capt. Butler predicted that if the Indians were hotly pressed, they will either “starve or surrender because of shortage of food.”70 Butler’s assessment of the Navajo’s plight was accurate. Military patrols combed the region. Citizen caravans roamed the countryside. Puebloan Indians organized war parties. And now the Utes, arch-enemies of the Navajos initiated a war on the beleaguered Navajos. The few Navajos who remained in their shrinking domain, crumbled under the constant pressure. It was either death by starvation or acceptance of Bosque Redondo. On September 1, Manuelito sent word to Fort Wingate that he, too desired to lay down his arms. In company of officers, Capt. Edmund Butler rode out to the Navajo camp located southwest of the post in the direction of Agua Fria. Butler found Manuelito and 23 of his followers. Manuelito presented himself to the cadre of officers, his left arm dangling uselessly by his side, pierced by a bullet in a skirmish several weeks earlier.71 Manuelito’s capitulation spawned the remaining holdouts to surrender. On November 7 the redoubtable Barboncito, a defector from Bosque Redondo, turned himself in at Fort Wingate with 64 of his people. By mid-December, Butler reported to headquarters the processing and deportation of more than 550 Navajos.72

The surrender of Manuelito marked the high point of Fort Wingate’s service in the Navajo wars. Companies B and F of the 1st New Mexico Cavalry, who served the longest stint at the post, along with Company G, 1st California Volunteers, witnessed Manuelito’s surrender. A week later the Volunteers were ordered to Albuquerque for mustering out of the Army.73 Indian depredations diminished but did not vanish following the capitulation of Manuelito’s and Barboncito’s forces. U.S. Regulars from Company C, 5th U.S. Infantry and Company L, 3rd U.S. Cavarly, stationed at Fort Wingate in 1867, were constantly engaged in blocking the path of Navajos streaming from Bosque Redondo. Indian sightings by San Mateo citizens and the report of Hispanic killings at Cebolleta kept Capt. Butler’s garrison in a state of flux.74

69 Butler to AAG. March 29, 1866. LR. Dist NM, roll 3. RG 98: Butler complained to Carleton that even with more men, he lacked serviceable horses. Some of the soldiers, he confessed, resorted to riding mules.

70 Butler to AAG. May 9, 1866. LR. Dist NM, roll 3. RG 98.

71 Butler to AAG. September 2, 1866. LR. Dist NM, roll 3. RG 98: Born about 1818 at the springs that now bear his name. Manuelito emerged from the Navajo wars as one of the principal Navajo leaders. In the 1870s, Manuelito became chief of the eastern Navajos, Ganado Mucho the western branch. He died at Manuelito Springs in 1893 of pneumonia, complicated by alcoholism. See Richard F. Van Valkenburgh. “Dine Bikeyah” Lucy Wilcox Adams and John C. McPhee ed. United States Dept. of Interior, Office of Indian Affairs, Navajo Service, Window Rock, Arizona. 1941. 91: Keleher. Turmoil in New Mexico. 501.


74 Butler to AAG. April 28 and August 16. 1867. LR. Dist NM, roll 3. RG 98.
Figure 2. Ground Plan of Fort Wingate, 1867. See Captain Edmund Butler to AAG, August 21, 1867, L R, Dist NM, roll 3, RG 98, from New Mexico State Archives and Records Service, Santa Fe.
While Butler endeavored to maintain a representative force to deter sporadic Navajo and Apache raids, he focused his summer attention to dealing with the rapid deterioration of the fort's fabric, which rendered the post unfit for human habitation. A Board of Officers convened on July 29 to examine the allegations and report recommendations. In their inspection, the board found the post "insufficient and so much out of repair as to be unfit for use." The board noted that the walls of the officers quarters, company quarters, commissary, and quartermaster building, hospital, and guardhouse were gradually settling due to an absence of a foundation to support them. Moreover, they added, "alkaline is eating away portions of the walls" and that adobes used in the construction were of inferior quality. The board recommended that the buildings be-condemned as unsafe and unfit for use.

Major General George Getty, Carleton's replacement as district commander, returned the report to Capt. Butler requesting his recommendations. Butler responded suggesting the post's abandonment and reconstruction 1500-2000 yards to the southwest, away from the alkali swamp that now inundated and infested the fort. Butler characterized the adobe decay as so wretched that "in some places a ramrod can be pushed through the foot of the walls." In other places, walls listed so much that orders to tear them down had be issued.

Superiors vacillated on Fort Wingate's course--to repair or rebuild. In May 1868, General William T. Sherman, now commanding the Military Division of the Missouri, provided some persuasive advice. On an inspection tour, he denounced the Bosque Redondo experiment as a failure citing "that the Navajos had sunk into a condition of absolute poverty and despair." Sherman advocated the return of the Navajos to their homeland. In addition, he saw the need to build posts closer to the seat of Navajo activities to better manage their affairs. Fort Wingate, at Ojo del Gallo, was too far removed from the Navajos. Sherman suggested that it be closed and another post built closer to the Navajos. Military officials bit on Sherman's recommendations.

Fort Wingate was officially abandoned on July 22, 1868, the same day that the Navajos passed under the walls of the crumbling adobe post. A new or second Fort Wingate was ordered constructed some 50 miles west at the ruins of Fort Lyon, near present-day Gallup. After the military closed the malpais garrison, nearby Hispanics moved into the region and utilized the surplus lumber and adobe to build new homes. Today the largely Hispanic community of San Rafael occupies the site of the former post.

Fort Wingate played a pivotal role in shaping the destiny of the Navajos serving as a staging ground for the Navajo war and as a deportation center for forwarding Navajos to Fort Sumner. Today no extant ruins of Fort Wingate exists, but its significance is recalled in the dynamics of two cultures struggling to control portions of arid New Mexico. In its brief six-year life,
Wingate had played a leading role in pacifying the Indians. Thousands of Navajos had been channeled through Wingate on the way to Fort Sumner. The establishment of Wingate went far beyond its military life, 1862-1868, for its creation had expanded the frontier from Cubero to the malpais themselves. With its demise, the frontier did not recess, instead Wingate spawned the foundations for future frontier settlements. \(^7^9\)

\(^7^9\) Higgins, "The Bear Springs Story," 14. The army razed Fort Wingate removing the lumber to new Fort Wingate, located 15 miles east of present-day Gallup. Families who settled near old Fort Wingate cannibalized the structures for their own use. By 1959, little vestiges of the post remained except for several perimeter posts. In 1989, not even these existed.
CHAPTER VI
SETTLEMENTS AND STEEL RAILS INVADE THE MALPAIS

U.S. troops remained at the malpais post through part of 1869 to finalize the transfer of government property to the second Fort Wingate, located at old Fort Fauntleroy (Lyons). Civilians had long sought to settle in the rich, fertile Ojo del Gallo Valley but fear of Navajo strikes had dampened their ardor. Now that the threat of Navajo attacks had diminished, citizens flocked to the valley, much to the concern of the neighboring Acomas. The Acomas complained bitterly that non-Indian developments in the valley infringed on Acoma patent rights. They argued that Acomans had farmed the region prior to the establishment of Fort Wingate, and indeed they had. Acoma fields at onetime extended north of present-day Grants, westward to Ojo del Gallo, and southward as far as Cerro Carnero.

Soldiers were summoned to Ojo del Gallo to preserve peace and to evict the squatters. The trespassers appealed to sympathetic officials in Santa Fe. Santa Fe sided in favor of the settlers, many of whom were ex-soldiers and had served at old Fort Wingate. To appease the Acomas, settlers openly bribed tribal representatives, promising to back their boundary disputes with Laguna and give them money if they withdrew their land claim to the Ojo del Gallo region. Some unscrupulous and naive Acomas accepted the terms and supplied the surveyors misinformation regarding their western boundary that omitted the Ojo del Gallo valley from the land patent survey. To make matters worse, the Acomas finished second best in their land squabble with the Laguna. Indian Agent, Benjamin H. Thomas, presiding over the case wrote in 1877, “While I am firmly of the opinion that the Acoma Indians would be defrauded of a valuable portion of their Grant--the Old Fort Wingate site--should a patent issue on the basis of this last survey, I nevertheless recommend that the survey be approved.” Thomas listed his reasons citing under item number two: “The Acomas have only themselves to blame for the loss of Old Fort Wingate district, because they falsely swore it away for a consideration.”

During the dismantling of Wingate—predominantly Spanish-Americans, ex-soldiers, and citizens—built a cluster of homes, in 1869, within a mile of the old post. They called their new settlement, San Rafael. Resources were plentiful. Timber and adobe from the post became the nucleus for new homes and outbuildings. The industrious settlers adapted the military's irrigation ditch for use in supplying water to their homes and field crops. The village grew rapidly. In just one year, according to the 1870 census, its population exploded to 678, surpassing the populations of older and more established communities like Cubero (population 581) and Cebolleta (population 630). Settlement patterning in San Rafael polarized into two distinct districts. Transfers from Cubero and Cebolleta settled the northern half of the town. New arrivals comprised primarily from the Rio Grande settlements, gravitated to the southern portion. Settlers developed an economic base centered around livestock, principally sheep, the standard-bearer of economics in frontier New Mexico.


2Minge. Acoma, 61-64.


4Barela. Ojo del Gallo, 10.
Houses in San Rafael typified New Mexico's adobe-style characteristics with one minor exception—the adobe included deposits of volcanic ash, a by-product of the nearby lava flows. Once dried, the blocks of volcanic adobe produced a solid building material. Vigas dissected the ceilings and were covered with a roof of boards and planks. To finish the roof, a compacted layer of earth usually one foot thick, blanketed the planking. Gypsum lined the exterior and interior walls of the homes. Imported from Los Cerritos del Jaspe, located at the base of Mount Sedgwick, the huge chunks of gypsum were broken into smaller components and inserted in an oven to bake. Oven heated, workers pulverized the gypsum into a powder. Adding water transferred the powder into a paste that made a lasting coat of plaster. Early San Rafael furnishings were spartan. A fireplace usually adorned one corner of the room, utilized for both cooking and eating. Hand-hewed furniture, heavy and durable, filled the home. Chair seats were secured by tacking or weaving leather strips across the frame. Compacted straw or wool was stuffed into bed mattresses, and if beds were not part of the household inventory, the mattresses were stored on planks next to the wall. Floor coverings, if any, consisted of washed-sheep pelts.

As San Rafael prospered, Spanish-Americans began a regimen of expansionism beyond the bulging limits of the community. Five miles north, Don Jesus Blea homesteaded on the Rio San Jose later to become site of the town of Grants a decade later. Ten years before Blea's homestead, Don Diego Antonio Chavez had attempted homesteading, and thus became the first homesteader in the immediate vicinity of the malpais. In 1873, the federal government produced the first survey of the malpais. The plats were done, not so much for benefit of future homesteaders, but for the railroad companies who received title to the lands in exchange for building transcontinental railroads through the area.

Besides the thriving town of San Rafael, other small communities emerged along the western flank of the malpais. Individual families homesteaded west and south of the Zuni Mountains. The well-established corridor linking Ojo del Gallo to Zuni Pueblo prompted travelers and traders to take up residency in the region. The village of Tinaja, three miles north of El Morro, blossomed in the late 1860s. Originally dubbed San Lorenzo, it was renamed Tinaja, Spanish for "earthen jar" because a nearby Indian ruin fit the description. Tinaja's existence evolved around the sheep industry. By the 1880s the community boasted several families in the area.

The country surrounding Tinaja became a seedbed for a new wave of missionary activities. In the winter of 1876-1877, Luther C. Burhan and Ernest A. Tietjen brought the Church of the Latter Day Saints to Tinaja, hoping to plant a colony. A smallpox epidemic enveloped Tinaja forcing Burhan and Tietjen to seek a healthier climate. The Mormons moved about a dozen miles west and established their colony four miles from the site of the present town of Ramah. They built two communities called Sevoia and Navajo. The Mormon knowledge of controlling water supplies in New Mexico's arid climate, and their affinity for communal living

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5 Ibid., 11.
6 Ibid.
7 Freddie Anderson, history project, "Tinaja file." December 19, 1979. Special Collections Room, New Mexico State University, Grants Campus, Grants, New Mexico.
8 Ibid.
9 "Inventory of the County Archives of Valencia County, New Mexico." September 1940. WPA Files, Folder 265, Number 31, New Mexico State Records Center and Archives, Santa Fe.
attracted modest converts among the Navajos. A decade later Church enrollment exceeded 100 members. In 1886, the town of Navajo made formal application for its own post office. The postal service rejected the proposal, replying that a village by that name already existed in New Mexico. The Mormons then changed the name of Navajo to Ramah, after a Book of Mormon.10

Despite the emergence of small communities around the malpais, growth remained agonizingly stagnant until one singular event transformed the economic fortunes—the coming of the railroads. The idea for a transcontinental railroad along the 35th parallel had its origins in 1853, when Lt. Amiel Whipple headed a railroad surveying party. Although Whipple's route proved practical, Congress failed to appropriate any funds for the project, opting instead to throw its support for a central line. Following the Civil War, Congress renewed its efforts to link east and west coasts with a series of transcontinental routes. In 1866, Congress proffered lands but no funds for completion of a northern and southern rail link.11 Even without construction funds, Congress' offer of free land ranked as a sufficient inducement to compel the highly competitive railroad companies to vie for the coveted routes. The government's generous land offer guaranteed the railroads a one-hundred-foot strip right-of-way plus support land for railroad stations and machine shops, all tax exempt. Congress sweetened the pot by offering extensive land grants consisting of alternate, odd-numbered sections on each side of the line, 20 miles in the states, and 40 miles in the territories. Should any of the strips contain homesteaders, an additional 10 miles of land would be added as indemnity land from which the railroad received compensation. Upon completion of a 25-mile segment inspectors verified track completion and then gave the railroad company title to the land.12

In 1866, the Atlantic and Pacific Railroad based in Springfield, Missouri, garnered a Congressional charter to build along the 35th parallel. The proposed path originated at Pacific, just west of St Louis, and continued westward across the Indian Territory to the Canadian River. From the Canadian it would traverse the open plains to Albuquerque, then sweep along the 35th passing the malpais country of western New Mexico. Termination of the Atlantic and Pacific tracks was the Colorado River, across from the future site of Needles, California. From the California state line, the Southern Railroad would build the steel tracks into San Francisco. Congress imposed a deadline of July 4, 1878, to complete the project.13 Financial troubles beset the A&P from the outset. By 1872, the company had completed only 361 miles of rail, stopping at Vinata, the Indian Territory. The Panic of 1873 added to the A&P's misery with the railroad company plummeting into receivership by 1875. The St. Louis and San Francisco Railway Company (Frisco) purchased the A&P stock in a bid to finish the line. It, too, fell victim to financial problems and provided little in way of construction.

Meanwhile, the Atchinson, Topeka, and Santa Fe Railroad worked vigorously to complete its network of steel rails between Topeka and Albuquerque. Early in June 1879, the AT&SF reached Las Vegas, New Mexico. Consuming 1.5 miles of real estate per day in track construction, the railroad surged southward toward Santa Fe. East of Santa Fe at the village of Lamy, one blow from a mighty hammer unified tie with rail ending Santa Fe's economic love

10Ibid.


affair with the Santa Fe Trail. The Santa Fe Trail, long the corridor linking mid-America to the Southwest, became obsolete overnight. No longer would the crackle of the bull whacker's whip ring out over the dusty landscape. No longer would settlers have to endure prolonged hardships or risk death and injury at the hands of highway men and recalcitrant Indians. Now, for the price of a railroad ticket, they could ride the steel rails in relative comfort and at a fraction of the cost in their westward migration. The great trail became a dusty memory.

Even as the AT&SF steamrolled towards Albuquerque, company officials pursued plans to share in the lucrative west coast traffic. In 1880, Santa Fe Railroad executives entered into a business partnership with the financially strapped St. Louis and San Francisco Railway. Under the agreement, the Santa Fe purchased one-half of the A&P stock held by the St. Louis and San Francisco. Contract stipulations specified the AT&SF must finish its tracks to Albuquerque, nearly complete anyway. Using the A&P charter, both the SL&SF and the AT&SF shared equally in the expenses of constructing the tracks westward from Albuquerque. The section of rail between Albuquerque and California was designated the Atlantic and Pacific Railroad Western Division.

Grading began April 8, 1880, from Albuquerque. The physical act of laying down track commenced in July. The route of the rails from Albuquerque veered south for 15 miles to Isleta before pointing west. Railroad engineers ordered the detour to circumvent terrain problems west of Albuquerque. From Isleta the tracks sliced west to Laguna Pueblo where it picked up the 35th parallel. The construction crew resembled an army, consisting of 4,000 men and 2,000 mules. Most of the workers came from Irish backgrounds, but other ethnic groups swelled the rank and file in the mammoth undertaking. When possible the railroad company hired locally. All able-bodied Acoma and Laguna Indians willing to work were offered temporary jobs. Track layers and graders were paid $2.25 per day; spikers and iron men received $2.50. West of Albuquerque workmen spiked down track at a clip of two miles per day. A portion of the line entered the Acoma grant for which the railroad negotiated a lease with the Tribe. While constructing tracks along the northern tier of Acoma property, workmen severed an irrigation ditch. The Atlantic & Pacific Railroad compensated the Acomas by repairing the ditch and paying $500 in damages.

Development of towns adjacent to rail lines normally provoked controversy. If not careful, the railroad company became entwined with political hagglers and investment speculators, all vying to influence the railroad on where it should establish its towns. To prevent outside intervention, railroad executives maintained utmost secrecy. To the profit-conscious railroads, careful consideration in selecting townsites hinged on access to water and investment return. Between 1870-1886, the AT&SF launched more than 100 towns. Many of the

14Waters, Steel Trails to Santa Fe, 66.
18Minge, Acoma, 65.
19Waters, Steel Trails to Santa Fe, 248.
Settlements and Steel Rails Invade the Malpais

villages became temporary "hell on wheels" as the railroad built west. Other towns earned a permanent station and prospered by railroad development.20

About the end of January 1881, steel rails invaded the malpais along the valley of the Rio San Jose. They penetrated the arid, lava-strewn domain to a point four miles north of the village of San Rafael at the site of Don Jesus Blea's homestead. An important event occurred at Don Blea's homestead, the railroad company selected it for a railroad stop.21 Originally dubbed Grant, it took its namesake from the trio of Grant brothers. The Grant Brothers had the railroad contract to build the tracks through the malpais. Grant rose from the volcanic ash and lava beds near Blea's homestead. The area possessed the key resources required for establishment of a town—water, wood, and economy. Another factor figuring in the decision to build a station at Grant, was its location, centered about halfway between Gallup and Albuquerque. A closer inspection reveals that Grant probably owed its existence to neighboring San Rafael. This thriving agricultural community, located on the western edge of the malpais and four miles south of Grant Station, offered economic potential railroad executives coveted.

With a coaling depot installed at Grant's Station, the malpais landscape changed abruptly. Stacks of cut lumber hauled in by flatcars transformed the stark terrain into a cluster of dwellings. Before long, telegraph poles punctuated the escarpment linking the region to the outside world. By January 1882, the population of Grant became sufficient that the United States Postal Service approved a post office for the village. In order to provide service for the inhabitants, Simon Bibo built a trading post. He acquired a portion of Blea's property and established his mercantile business next to the tracks.22 Grant flourished briefly during the hubbub of railroad construction. The work gangs, however, pressed westward leaving in their wake a struggling outpost in the malpais. But the railroad had left an indelible mark on the region, perhaps more than any single event before or after. The coming of the steel rails permitted the area to gain an economic foothold that attracted a slow but steady increase in population. The Atlantic and Pacific Railroad, later to be totally absorbed by the Atchison, Topeka and Santa Fe Railway, had implanted a faint heartbeat into the malpais. Whether the railroad's economic gamble succeeded or failed hinged on the quality and variety of people to meet the challenge.

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21 The Grants Daily Beacon, New Mexico. Centennial Edition 1882-1982. April 30, 1982, reports that the railroad reached Grants in July 1881. This is an error because the Daily New Mexican, February 2, 1881, announced rails had been installed as far as new Fort Wingate, east of Gallup. See Waters, Steel Trails to Santa Fe. 69. The activity in June 1881 most likely involved the erection of buildings following the railroad's decision to establish a coaling station at Grant.

Figure 3. Section House, Grants Station, New Mexico, July 1881. Photo by Ben Wittick, Collections in the Museum of New Mexico.
CHAPTER VII
ECOLOGICAL DIVERSITY AND EXPANSION

If anybody could eke out a living in the malpais, it was Simon Bibo. A Frenchman of Jewish faith, Bibo and his brothers and sisters emigrated to New Mexico after the Civil War. Possessing a sharp business mind, Simon entered the mercantile trade, operating a trading post at Cebolleta. Purchasing or trading for corn from the surrounding ranchers, Bibo, in turn, hauled the produce by wagons across the malpais, passed the ice caves at Bandera Crater, to Fort Apache, Arizona. For a brief period, Simon occupied the position of post trader at Fort Apache. In 1871, he returned to Cebolleta where he engaged in cattle ranching and expansion of his business enterprises, which included satellite stores at Cubero, Laguna, San Rafael, Moquino, and Bibo. The visionary Bibo perceived the economic benefits that the railroad offered with its station at Grant. He jumped at the opportunity to open another trading post. Simon became Grant's second postmaster in 1883, a position he maintained intermittently for 22 years. In 1912, Bibo served in New Mexico's first State legislature.

Bibo's economic opportunities were a direct result of the railroad, which developed the sheep and cattle industry. With the advent of the railroad, ranchers had a means of transporting their livestock to market. Moreover, the railroad encouraged the ranchers to expand their herds. New Mexico's sheep census skyrocketed following the subjugation of the Indians and the coming of the railroad. No longer did Navajo, Ute, or Apache raiders devastate the surrounding flocks. Settlers expanded their herds without fear of livestock loss. In 1870, the New Mexico sheep count numbered 619,000 animals statewide. Ten years later the sheep population exploded to 3.9 million. According to the New Mexico census taken in 1885, ten thousand sheep alone belonged to San Rafael residents, Martin Gallegos and E.Q. Chavez.

San Rafael rapidly became the center for sheep raising. Sheep ranchers acquired or controlled vast grazing empires blanketing an area south of the chain of craters and continuing eastward to the Acoma Reservation. The Atlantic and Pacific Railroad Company, in a bid to remain solvent, began the process of selling off its vast land grants in Arizona and New Mexico. Jose Leon Telles, Manuel Padilla Y Chavez, Monico Mirabal, and Romulo Barela carved out huge holdings in the San Rafael valley. Monico Mirabal and his son Don Sylvestre Mirabal, took advantage of the railroad's desire to liquidate its assets in the region. Monico purchased or leased over 250,000 acres of land, with property holdings extending south of Bandera Crater.

In managing their sheep, large landowners leased out herds under a Spanish term "partidos." "Partidos" represented the lessee who agreed to supervise the wandering herds. After a specified time period, the lessee returned to the owner his original herd plus a percentage, with

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2Tietjen, Encounter With the Frontier, 55.


5Barela. Ojo del Gallo. 8-9; Interview with David Candelaria at his home at the Ice Caves, September 23, 1988.
the lessee retaining possession of the remainder. The "partidos" system allowed small landowners with little capital to establish their own herds. Sheepherders known as Basques, derived from the herders of the Spanish-French borderlands along the Pyrenees Mountains, watched over the "partidas," numbering fifteen hundred to two thousand animals. Traditionally, two Basques superintended the needs of the "partidas."

At the height of the sheep industry, 1880 to 1925, scores of sheep camps dotted and circumvented the malpais terrain. A solitary existence marked the life of the Basque herder. In order to provide enough pasturage, Basques moved their flocks every 3-4 days. A typical herd of ten thousand to twelve thousand required grazing land equivalent to three townships or an area 18 miles long and 18 miles wide. Basques lived with the sheep all year, sleeping in a tent in the winter. A fire in front of the flapless tent provided the only source of heat and means of preparing warm meals. In June sheepshearers invaded the camp on the heels of the May lambing season. Depending on the skills of the individual shearer, 80 to 110 sheep were sheared daily by each person. Each sheep yielded on average four pounds of clipped wool. Packed into 200-pound bags and placed on a waiting wagon with about seven other bags, the wool bounced along the malpais to a destination point, usually Grant because of its location on the railroad.

Coinciding with the development of sheep ranching around the malpais, the cattle industry took root. For ethnic and economic reasons, its growth lagged far behind the more established sheep business. Statistics for Valencia County in 1885 reflected the disparity. Countywide, sheep outnumbered cattle 157,400 to 16,526. In the community of San Rafael, sheep held the upperhand 10,000 to 820. Statewide, the 1880 cattle census depicted 347,936 cattle, pale in comparison to the 3.9 million sheep on New Mexico's range lands. Toward the end of the decade cattle companies began to make inroads into the region. In 1887, the Arizona Cattle Company, whose primary investors constituted officers from Fort Wingate, purchased 121,490.65 acres at $1.00 per acre from the Atlantic and Pacific Railroad. Much of the land lay west and south of the malpais. Another local ranching outfit, the Cebolla Cattle Company acquired 41,592.19 acres east of the malpais at 50 cents per acre. Six miles east of Grant, on June 25, 1884, the Acoma Land & Cattle Company became incorporated. This Missouri-based company with offices in Albuquerque, controlled thousand of acres east of the malpais. Ten miles west of Grant at the new village of Bluewater, the Zuni Mountain Cattle Company began operations in 1892.

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7 Interviews with Manuel Padilla and Pierre Arrossa

8 Territorial Census 1885, Valencia County. Territory Archives of New Mexico. Reel 43. Frames 393-394. New Mexico State Records Center and Archives, Santa Fe.

9 Greever, Arid Domain, 48.

10 Ibid.


12 Christine Jones. Place Names in Valencia County. 1938. WPA Files. New Mexico State Records Center and Archives, Santa Fe.
Both the cattle and sheep industries expanded their presence in the area until smitten with a series of natural and human disasters that forced them to trim back their ambitious plans. Severe droughts plagued New Mexico between 1891 and 1893. The Panic of 1893 reverberated through New Mexico with the region feeling the aftershocks until 1897. To make matters worse, the depletion of the range lands from overuse hampered progress, giving clear warning that the land did not guarantee unlimited and unrestricted use.

Another industry began to strike an economic cord in the malpais vicinity in the 1890s—timber. Timber from the Zuni Mountains went into the construction of Fort Wingate at Ojo del Gallo. The interest in timber continued with the advance of the A&P Railroad in 1881. The abundance of forested lands on the Zuni Mountains achieved significance because no other sources of lumber lay adjacent to the railroad's route. The A&P awarded J.M. Latta the contract for providing the railroad with ties. Latta sub-contracted with John W. Young for the production of a half-million ties, a quantity sufficient to produce 200 miles of track. At Bacon Springs on the continental divide, Young established headquarters for his tie-cutting camp, conveniently located near the railroad depot at Crane's Station. In 1882, Crane's Station became Coolidge, named for railroad executive, Thomas Jefferson Coolidge. In 1898, Coolidge became Dewey, and by 1900, Dewey was dropped in favor of Guam. Later the town was changed to Perea before locals ultimately settled on Coolidge. Lumber operations flourished south of Coolidge in the 1880s. At the one point, the area supported three sawmills.

On June 30, 1890, William W. and Austin W. Mitchell of Cadillac, Michigan, purchased 314,668.37 acres of forested land in the Zuni Mountains from the Atlantic and Pacific Railroad. The Mitchell Brothers inspected their reserve in May 1891 to select sawmill and planing mill sites. On the same visit they investigated the feasibility of laying tracks from their mill, deep in the Zuni Mountains to the A&P rails. Convinced of the practicality of their idea, the brothers entered negotiations with A&P executives, culminating in an agreement whereby the railroad would construct the spur line in exchange for monetary considerations. The railroad appropriately enough became known as the Zuni Mountain Railway.

By early 1892, the new townsite of Mitchell, 30 miles west of Grant's Station, began to take form. One hundred and fifty people initially set up residence. Mitchell supplied more amenities in terms of general merchandise stores, restaurants, cafes, and medical offices than towns of much larger stature. The economic outlook did, indeed, appear bright. Mitchell

13Ibid., 4.


17Ibid., 4.
Brothers' contract with the A&P Railroad to saw and deliver 12 million feet of lumber per annum lured the Mitchell citizenry into a sense of false security.\(^{18}\) In May, the narrow-gauge locomotive arrived. Construction of the Zuni Mountain Railway clipped along at a rapid pace of one-half mile per day. A month later the sawmill began cutting lumber. Work production had barely started when disaster befell the enterprise. The one and only locomotive derailed in the woods, causing a shutdown until a replacement engine could be built and transported to the logging site. The new locomotive arrived in late August and logging resumed. A month latter Mitchell Brothers closed operations for good. Reasons for the closure suggest the brothers became despondent over the sick economy (Panic of 1893) and irreconcilable differences with A&P concerning freight rates. Mitchell Brothers conveyed back to A&P 22,565.08 acres but retained clear title to more than 292,000 acres.\(^{19}\)

The demise of Mitchell Brothers shocked and crippled the town of Mitchell, too. Shaken to its knees, it fought to survive. In 1896, artifacts excavated from Pueblo Bonito Ruins at Chaco Canyon by the Hyde Exploring Expedition were housed in Mitchell. The company built three warehouses and in the process saved Mitchell from ghost-town status. Hyde erected a store in Mitchell to handle its lucrative business dealings in Navajo rugs and jewelry. They succeeded in renaming the community Thoreau, after the philosopher, Henry David Thoreau.\(^{20}\)

In 1903, when the Albuquerque firm, American Lumber Company, acquired Mitchell Brothers' 292,000 acres, it resurrected the timber industry at Thoreau. American Lumber formed a business partnership with the Atchison, Topeka and Santa Fe Railway, formerly the Atchison, Topeka and Santa Fe Railroad. The Atlantic and Pacific Railroad, the Atchison, Topeka and Santa Fe Railroad, and the Frisco had plunged into receivership following the Panic of 1893. Under reorganization the A&P became part of the Atchison, Topeka and Santa Fe Railway.\(^{21}\)

Because of better management, the American Lumber Company thrived for a decade. At its height of operation, about 1910, the firm sawed 60 million board feet of timber at its Albuquerque sawmill. In other years the firm averaged 35 million board feet. Approximately 1,500 persons were on its payroll, 700 of them employed as cutters in the Zuni Mountains south of Thoreau.\(^{22}\) Logs were hauled over the Zuni Mountain Railway, which included 55 miles of primary track and additional spur lines. At Thoreau, the cut logs were stacked on flatcars and shipped to the planing and sawmill plant in Albuquerque. An average of 100 carloads of timber rumbled eastward from Thoreau bound for Albuquerque daily.\(^{23}\)

Logging revitalized Thoreau and produced a rippling effect that created other temporary boomtowns. Deep in the forests of the Zuni Mountains, headquarters were established for the logging operation at Kettner, named for the local homesteader. Kettner claimed a round-house and a two-story hotel with 50 rooms. Nearby a "cookhouse" accommodated upwards to 700

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\(^{18}\) Tietjen. *Encounter With the Frontier*. 106.


\(^{20}\) Tietjen. *Encounter With the Frontier*. 89.

\(^{21}\) Waters. *Steel Trails to Santa Fe*. 250.

\(^{22}\) Glover and Hereford. *Zuni Mountain Railroads*. 32.

\(^{23}\) Tietjen. *Encounter With the Frontier*. 89.
hungry lumberjacks at one sitting. Kettner's death evolved almost as fast as its birth. When logging operations transferred to Sawyer a few miles distance, Kettner folded. Like its predecessor, Sawyer spawned a reputation as a rough-and-ready town. When the timber cuttings moved on to virgin tracts, Sawyer, too faded into oblivion.

The American Lumber Company remained active until September 1913, when it suddenly halted all operations. Defaulting on its mortgage bonds, the company fell into receivership. In 1917, through a labyrinth of corporate maneuvers the tangible assets of American Lumber eventually became the property of the McKinley Land and Lumber Company, who, in turn, was owned by the West Virginia Timber Company. McKinley Land and Lumber Company rekindled logging operations in the Zuni Mountains until its absorption by West Virginia Timber Company president, George E. Breece, in 1924.

Besides the permanent establishments of Thoreau and Grant, the community of Bluewater emerged, fastened to the umbilical cord of the railroad. In 1881, Bluewater, located 10 miles west of Grant, was founded. To encourage settlement, lurid advertisements appeared in newspapers soliciting settlers to homestead in the region. Two people who responded to the call were A.E. Tietjen and F.P. Nielsen. Both bore affiliation with the Mormon Church and envisioned the church's expansion beyond the boundaries of Ramah. Tietjen and Nielsen inspected Bluewater and proposed to Church elders that Bluewater and Cotton creeks should be dammed. They argued that if enough water could be impounded the area could sustain agricultural pursuits.

In 1894, the Mormon Church nodded in acquiescence to the plan, leading to the development of the Bluewater Land and Development Company. The company purchased land from the railroad and built their townsite three miles from Bluewater Station. Nine miles west Mormons erected an earthen dam to impound the waters of Bluewater and Cotton creeks. The dam broke in 1900 but was quickly rebuilt. Torrents of rain washed it out again in 1904, 1906, and 1909. Despite the calamities, the Mormon colony persevered.

Economic expansion and a moderate growth rate notwithstanding, the malpais region at the turn of the century still reflected some of the charm, certainly the reputation, as a holdover of the Wild West. Railroad workers, cowboys, sheep ranchers, sodbusters, and lumberjacks formed an unlikely melting pot. Fisticuffs, stabbings, shootings, drunken rowdies, and train robberies occurred frequently. On June 20, 1889, a brawl broke out at the Block and Bibo Store in Grant, following a spree of drinking by fun-seeking cowboys from the nearby Acoma Land and Cattle Company spread. Bartender Sol Block refused to serve beer to the drunken cowboys, which precipitated the fight. Simon Bibo, Block's business partner and a deputy sheriff, came...
to his friend's assistance. In the melee, Block picked up a revolver from the barroom floor and began shooting. When the smoke cleared, one cowpuncher lay dead, another seriously wounded. Block and Bibo emerged from the encounter with bruises and bloody faces. Fearing reprisals from revengeful cowboys, armed guards were posted around the darkened town and the saloon. San Rafael Justice of the Peace, Casimiro Lucero, acquitted Block and Bibo of murder charges on grounds of self-defense.  

In November 1897, the last train robbery of the Santa Fe Railroad occurred near the malpais. While accounts differ, the perpetrators apparently belonged to the Black Jack Christian gang. Gang members boarded the eastbound train either before or at Grant's Station. About six miles east of Grant, the outlaws disengaged the baggage cars from the locomotive and express car. Using explosives, they blew apart the safe discovering $100,000 in gold and currency. The bandits headed south toward the malpais hoping to lose any would-be trackers in the gnarled lava beds. While some of the outlaws were apprehended, the whereabouts of the gold remained elusive giving rise to speculation that it is still hidden in the malpais.  

Accounts of buried gold in the malpais persist. The most notorious version of malpais gold is the chronicle of the "Lost Adams Diggings." According to local legends, freighter J.J. Adams had accompanied a party of miners into the malpais in 1864, to search for gold. The group discovered gold but in the process began to run low on provisions. Adams went to Fort Wingate to obtain supplies. On his return, he found all of his companions killed except for one by a band of Apaches. The two men buried the gold and managed to escape the wrath of the Apaches. Adams and his wounded friend, John Brewer, finally reached the sanctuary of Fort Apache, Arizona. While at Fort Apache, Adams allegedly shot an Indian in a dispute over a horse. Imprisoned, he was unable to return to the malpais to reclaim the gold. When Adams reappeared in the malpais some 20 years later, he failed to locate the site. Years of wandering over the rugged lava terrain yielded nothing and Adams left in frustration but not without implanting the seeds of gold legends in the malpais. 

At the closing of the final quarter-century of the 1800s, the malpais region reflected remarkable economic and sociological adjustments. The Navajos no longer held dominion over the country, in their stead advanced sheepmen and cattle ranchers. Along the ridges and valleys of the Zuni Mountains, timbermen emerged and tapped into what seemed to them an unlimited resource.

Moreover, dugouts and rough-poled cabins punctuated the landscape. Bean fields and chicken coops, dams and dikes had supplanted a sagebrush environment. Towns like San Rafael, Grant's Station, Thoreau, and Bluewater were survivors in the never-ending cycle of boom or bust. But without the advancement of the railroad none of the changes could have taken place easily. The end of the first quarter-century still found the area tethered to the railroad's umbilical cord of economic dependence.

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31 See Tietjen, Encounter With the Frontier, 45-47. In an interview with Grants native, Wilber Thigpen. Thigpen remembers that gold searchers made an annual pilgrimage to Grants and stayed at his father's motel on Santa Fe Avenue. During the day the treasure hunters combed the malpais in search of Adams' gold. See Wilber Thigpen. interview held in Grants, New Mexico. August 26, 1988, oral history tape deposited at El Malpais National Monument.
Figure 4. In the lava beds near McCartys, circa 1885. Photo by Ben Wittick, Courtesy School of American Research, Collections in the Museum of New Mexico, Neg. No. 16475.
Figure 5. In the lava beds of New Mexico, the rough, jumbled lava made a haven for outlaws and spawned lurid accounts of gold buried in the malpais. Photo by W. Cal Brown, Courtesy Museum of New Mexico, Neg. No. 66552.
Not since the railroad had one single event so significantly altered the fortunes of El Malpais as the emergence of timber mogul, George E. Breece. Breece, the new owner of the McKinley Land and Lumber Company activities near Thoreau, reorganized the company and named it for himself, the George E. Breece Lumber Company. Breece continued logging operations south of Thoreau, shipping 30 million board feet annually. But the pragmatic Breece realized that 25 years of intense timber-cutting had depleted the forests. In order to profit from his heavy investment, Breece decided to shift timber harvests from Thoreau to the untapped belt of forests comprising the Zuni Mountains southwest of Grant. On the west side of Grant, Breece constructed a roundhouse, now the site of Diamond G Hardware, and homes to support his army of laborers that swelled the town and the countryside with 4,000 new residents.

To reach the virgin forests, Breece constructed tracks from his roundhouse westward. Begun in 1926, the route of the Breece Railroad traversed the malpais west of Grant ascending Zuni Canyon and continued to Malpais Springs, Paxton Springs, and Aqua Fria Springs—a distance of 20 miles. Upon completion of all the spur lines, 38 miles of track network laced through the southern Zunis. The dismantling of the defunct Zuni Mountain Railway south of Thoreau provided some of the track. By early 1927, timbermen invaded the depths of the forests and began felling trees. Breece endeavored to make his mammoth enterprise efficient. Whenever possible he utilized trucks to haul the wood to the main line railroad, thereby becoming less dependent on the railroad.

Breece Lumber Company guaranteed immediate prosperity for Grant and San Rafael. New businesses exploded on the scene, and old ones enlarged in order to provide services for new customers. Schools, churches, and community buildings sprang up. In 1929, Grant boasted a high school, one of the few in the huge expanse of western Valencia County. The Grant Review, a weekly newspaper published in Gallup and bused to Grant, provided local news and commentary. Running water and electric lights embraced Grant in 1929, catapulting the booming settlement into mainstream America.

While Grant basked in the glow of its success, neighbors to the west in Bluewater, also improved their economic status. The Mormon colony erected a permanent concrete dam to replace their antiquated and troublesome earthen dam. The Santa Fe Railway became interested in the project partly because the porous relic often broke and washed out sections of Santa Fe track. Capt. W.C. Reid, attorney for the railroad, spurred efforts for the construction of the Bluewater Irrigation Reservoir and the Bluewater Dam. The final completion of the dam produced

1Glover and Hereford, Zuni Mountain Railroads, 40.
4Glover and Hereford, Zuni Mountain Railroads, 44.
immediate results for it converted 6,000 acres of arid wasteland into tillable, irrigated croplands.\footnote{Jones, "Corrections on MMS of October 7, 1938." WPA Files. New Mexico State Records Center and Archives. Santa Fe; "Inventory of the County Archives of Valencia County. New Mexico." September 1940, WPA Files. New Mexico State Records Center and Archives. Santa Fe; "This is Grants." pamphlet, Special Collections Room, New Mexico State University. Grants Campus; Grants Daily Beacon. New Mexico, Centennial Edition 1882-1982, April 30, 1982: There is some confusion as to when the dam was completed. Jones's "Corrections on MMS of October 7, 1938. and the "This is Grants" pamphlet report the completion date as 1927. The centennial edition of Grants published by the Grants Daily Beacon states the dam was finished in 1929.}

Prior to the coming of Breece Lumber, the quantity of homesteaders was a trickle. To encourage settlement, Congress passed in 1916, the "Stock Raising Homestead Act," which permitted homesteaders to homestead the public domain. The 1916 Homestead Act stipulated that individual persons could acquire a section of land upon payment of a $34 "filing fee." To retain the property the homesteader had to remain on the land for seven months out of the year for a period of three years. In addition to living on the land, the homesteader agreed to build a "habitable" home and show evidence of $800 worth of improvements, usually taking the form of fence lines or putting so many acres of lands into production. At the expiration of three years the settler paid a "proving fee" and took official possession of his property.\footnote{Our Public Lands," Grants Daily Beacon, October 1, 1987.} To assist the returning veterans of World War I, the government allowed them to establish ownership after only six months.\footnote{Grants Daily Beacon, October 1, 1987; Interview with Mr. and Mrs. Aldridge and Mr. Lewis Bright in Grants, New Mexico, September 1987, titled Oral History around El Malpais, Special Collections Room, New Mexico State University. Grants Campus.}

With the development of the thriving timber industry at Grant, the number of homesteads on the perimeter of the malpais increased steadily, particularly during the Depression Era. The eastside of the malpais became dotted with new arrivals. Most immigrants originated from Texas and Oklahoma. Nearly all were poor. Homes were constructed from long timbers, if available, otherwise a poled house or dugouts sufficed. The poled house was fashioned by setting into the ground four corner posts with a long pole forming the roof. Shorter poles set vertically framed the structure. Windows and doors were fashioned from cutting away portions of the vertical poles. Cabins normally contained two rooms separated into sleeping and eating compartments. A log wall or cloth curtain sometimes partitioned the rooms. Roofs and floors consisted of packed dirt. In some instances homesteaders built rock houses. The eastside of the malpais contained an unlimited supply of rock debris, representing the ruined foundations of prehistoric Indian homes who had initially settled in the area. Resourceful settlers loaded their wagons with rocks and carted them home for use in erecting their own structures.\footnote{Freddie Anderson, "Tinaja File." Special Collections Room, New Mexico State University. Grants Campus; Evon Z. Vogt, Modern Homesteaders (Cambridge: Harvard University Press, 1955) 37; Interview with Lewis Bright at his home near the Ice Caves. August 23, 1988. tape and transcript now in possession of El Malpais National Monument.}

A hardscrabble existence marked the life of the homesteader. Lack of water defeated most attempts to foster a living from dryland farming. Amenities like schools, churches, and electricity--the latter a creature comfort unavailable in the rural malpais until the 1950s--produced a lasting, negative influence on homesteading. Beans, corn, and vegetables together with chickens, hogs, and beef represented the normal extent of their daily fare. If any food surplus existed, the profits were reinvested in necessary staples such as coffee, flour, and sugar. Yet, the homesteader was not self-sufficient. Often they worked for the larger ranchers,
the big timber companies, sold firewood, or sought seasonal employment to make ends meet. Homesteaders took jobs with the Civilian Conservation Corps under the Work Program Administration in the 1930s. Lewis Bright, who homesteaded on the west side of the malpais near the commercial ice caves, found employment with the CCC, helping install culverts along New Mexico Highway 174 (present New Mexico 53), which runs through the malpais from Grants to Zuni. Bright and other locals improved and graded the road. Cinders from nearby cinder cones comprised the road base. Construction of State Highway 174 occurred in the summer of 1938, connecting with State Highway 53 about 14 miles east of El Morro National Monument. Most homesteaders did not last three years. Primitive living conditions, low wages, and the Depression of the 1930s forced them to abandon their homesteads and follow the road to better paying jobs. They left behind their cabins, poignant reminders to those that followed in their footsteps, that life can be bitter and the malpais landscape, unrelenting and unforgiving.

The ebb and flow economics of the livestock growers seemed inconsequential compared to the incessant challenges confronting the homesteaders. Surviving sheepmen and cattle ranchers who escaped the financial debacle of the Panic of 1893 plunged into the twentieth century riding the crest of prosperity. Demand for wool and beef increased through the end of World War I. But the rancher's nemesis, drought reappeared in 1918 and resulted in decreased production. In 1919, the stock market plummeted, and malpais stockmen witnessed falling prices. To make matters worse for the cattlemen, an epidemic of scabies infected the cattle causing widespread problems. Between 1927 and 1929 sheep prices dipped, while the expense of feeding the animals skyrocketed. In Valencia County, where it had cost twenty-five cents to maintain each head of sheep in 1890 had by 1927 escalated to $4.13. The maintenance expense for sheep, coupled with low wages, forced many of the smaller ranchers out of the business during the 1920s and 1930s.

San Rafael wool baron, Don Sylvestre Mirabal, survived the economic adversity, partly because of his huge land holdings. Shrewd, hard-working, and thrifty, Mirabal built an empire on sheep. Reportedly, the largest landowner in New Mexico, Mirabal owned or controlled land south of San Rafael and west into the Zuni Mountains. Mirabal purchased much of the land at a fraction of its value. Malpais homesteaders often entered into "partidos" agreements with Mirabal, using their homesteads as collateral. If the settler defaulted, Mirabal took title to

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10Interview with Lewis Bright. August 23, 1988: Interview with Christine Adams. September 19, 1988: Interview with Mr. and Mrs. Aldridge and Mr. Lewis Bright. September 1987. All interviews with the exception of the combined Aldridge and Bright interview are on file with El Malpais National Monument. The Aldridge and Bright interview is on file in the Special Collections Room, New Mexico State University, Grants Campus.

11Interview with Lewis Bright, September, 1987. Grants, New Mexico. Special Collections Room, New Mexico State University, Grants Campus.


13Jones, "Corrections on MMS of October 7, 1938." WPA Files. New Mexico Records Center and Archives. Santa Fe.


15Barela, Ojo del Gallo. 26.

Figure 6. Sheep camp at Cerro de la Bandera about 1920s. Sheep remained kingpin in el malpais economics until supplanted by cattle. Photograph taken by W. T. Lee. Credit U. S. Geological Survey, Photographic Library, Denver, CO.
their land.\textsuperscript{17} Despite his enormous wealth, Mirabal remained unaffected by success. His workers described him as a penny-pinching, pot-bellied man, whose habiliments usually consisted of a "worn-out pair of bib overalls, an old hat someone else had thrown away, and, in the winter time, a ragged serape."\textsuperscript{18} His workers considered him a kind person but a crafty businessman. Mirabal's death in 1939 terminated large-scaled sheep ranching in the malpais. Cattle became kingpin. The Mirabal estate, an impressive white, two-story, rock house still towers over San Rafael, a fitting tribute to the Mirabals and a symbolism to the four-century dominance when sheep ruled New Mexico.

Timber, that bastion of erratic employment in the region for 40 years, fell on hard times during the Depression. In 1929-30, Breece Lumber Company experienced a soft market, compelling the firm to layoff workers and induce brief work stoppages in order to remain solvent. The economy did not improve. Breece resorted to frequent work halts and imposed a 20\% decrease in wages to keep from going under. By 1931, Breece Lumber Company only employed about 300 timberman in the woods south of Grant. By 1932, Breece decided it might be more profitable to lease his operation.

Grant businessmen, M. R. Prestridge and Carl Seligman, co-owners of the Bernalillo Mercantile Company with stores in Bernalillo and Grant leased the timber operations from Breece Lumber Company. Prestridge and Seligman endeavored to modernize Breece's antiquated rolling stock by purchasing several locomotives, but whenever possible they hauled logs via trucks to the railroad. In 1934, Prestridge and Seligman worked the forests around Paxton Springs, a small community located a few miles northwest of the Ice Caves, which employed approximately 100 men. Undeterred by a sluggish economy, the owners expanded operations by building tracks from Agua Fria to Riveria Canyon. Logging camps pursued the path of the railroad in the Zunis. The logging railroad advanced southwest toward Tinaja. By 1941, however, Prestridge and Seligman could not sustain operations on a profitable basis. They terminated logging from Grants (the town had changed its name from Grant to Grants in 1935) selling back to Breece Lumber Company its rolling stock. Breece did not reopen its Grants facilities. By the summer of 1942, it also closed its giant sawmill in Albuquerque.\textsuperscript{19}

The pullout of Prestridge and Seligman was followed by one other bid to keep the timber industry big time in Grants. In 1946, Prestridge Brothers, Bill and Red, contracted with the New Mexico Timber Company to haul timber from Mt. Taylor. Lumbering activities around Mount Taylor had been active since the 1930s. The Prestridges remained in business for about four years then suspended operations. Large commercial timber operations in the malpais region had gone the way of the sheep industry.\textsuperscript{20}

With timber and sheep hit hard, malpais residents turned toward agriculture and mining as a means of economic support. A decade after the construction of the Bluewater Dam, Mormon farmers began to exhibit the profitability and suitability of raising crops on a grandiose scale. In 1939, businessmen Ralph Card and Dean Stanley purchased 400 acres of land near

\textsuperscript{17}Tietjen, \textit{Encounter with the Frontier}, 64.
\textsuperscript{18}Ibid., 62-63.
\textsuperscript{19}Glover and Hereford, \textit{Zuni Mountain Railroads}, 44-50.
\textsuperscript{20}"The Lumber Industry and Grants," February 21, 1984, taped interview, interviewee unknown, Special Collections Room, New Mexico State University, Grants Campus.
Bluewater. They initiated an experimental farm to test the adaptability of lettuce, cauliflower, broccoli, carrots, cabbage, potatoes, onions, and peas to New Mexico's climate. The pilot program proved successful, propelling the Rio San Jose valley from Grants to Bluewater into an economic upsurge. Carrots became the chief cash crop. In their best years, 2,000 acres of leafy-topped carrots under brand names like "Sky Top" were crated, refrigerated with ice, and placed inside waiting Santa Fe Railway boxcars. Over the course of the carrot season 2,000 boxcars were filled with vegetables. The carloads of produce rolled slowly out of the Grants depot headed for eastern stores with a market value of $2,500,000.

The carrot industry was seasonal, planting in April, and harvesting in late summer and fall. Locals worked in the fields and in the processing plant. Navajos, hired as cheap labor, found jobs primarily in the fields. To provide shelter for the field workers, the companies erected crude huts with indoor plumbing. Initially, the harvesters accepted their pay in script, to be traded at the company commissary. Later the workers received their payment in cash. The carrot enterprise lasted for nearly 20 years. Its death in the late 1950s occurred with the introduction of cellophane bags, which eliminated the demand for leaf carrots. In addition, Bluewater growers could not compete with cheap produce emanating from California.

Prior to the late 1930s, mining activities were marginal in the malpais. In 1916, a small copper mine operated in the Zuni Mountain town of Dierner, supporting 10-20 miners and their families. Unprofitable, the mine shutdown in the early 1930s. By the early 1940s, fluorspar and pumice mines developed near Grants. Three fluorspar mines operated by the Navajo Fluorspar Company flanked the west side of the malpais near the commercially operated Ice Caves. Navajo's peak production period occurred during World War II, putting 150 families to work. Fluorspar extracted from the mines was transported to Grants where it underwent processing. Much of the miner's production fell under the auspices of national defense contracts. Fluorspar was utilized in the manufacture and hardening of steel, use in paints and acids. The fluorspar mines remained active until 1952, when foreign competition drove down the price of the mineral.

Pumice, an abrasive substance used for polishing manufactured products, was extracted north of Grants during World War II. The Pumice Corporation of America operated a mine located eight miles north of Grants. In the 1990s, pumice was still extracted north of Grants under the flagship, U.S. Gypsum Corporation.

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22 "This is Grants," Special Collections Room, New Mexico State University. Grants Campus.
23 Interview with Vidal Mirabal, on carrot industry. April 17, 1984. Special Collections Room, New Mexico State University, Grants Campus; Interview with Wilbur Thigpen. August 26, 1988, tape on file at El Malpais National Monument.
25 Interview with Lewis and Dovie Bright. August 23, 1988; Albuquerque Journal, September 21, 1941.
Figure 7. During World War II, fluorspar mines punctuated the Zuni Mountains offering some economic relief to the depressed region following the demise of the timber industry. Fluorspar, a translucent mineral of varying colors, was extracted and sold to satisfy defense contracts. Fluorspar mines were active in the Zunis until the 1950s, until cheap imports undercut domestic prices. Shown here is Fluorspar Mine Number 21, photograph taken about 1948, from the collection of Mrs. Dovey Bright.
Figure 8. Fluorspar Mine Number 21, showing conveyor belt system. Fluorspar was a multi-purpose mineral used in the manufacturing and hardening of steel, paints and acids. Photograph taken about 1948, from collection of Mrs. Dovey Bright.
The mining of coal never became a large enterprise around the malpais. Heavy commercial coal mining interests developed west of the malpais near Gallup. Localized coal mines operated by 2-3 persons normally satisfied all demands and needs for coal.

While pumice and fluorspar assisted the war effort, the lava beds aided the nation's war effort in a different manner. The United States Army at Kirtland Air Force Base in Albuquerque began a search in 1942 to locate a practice bombing range. Army personnel gazed toward the malpais as an appropriate site. Under Public Land Order No. 108 dated March 31, 1943, nine square miles of rugged lava terrain in El Malpais were removed from the public domain for military purposes. Practice bombing missions began soon after the June 15, 1943, declaration of taking in the condemnation case. Officially, the military called the site, Army Air Forces, Kirtland Demolition Bombing Range. McCarty's Crater, at the center of the nine square miles, became the primary target area as indicated by the number of shell fragments and pockmarks found. Although nothing is known of the type of planes or the number of bombs dropped, it was confirmed by the discovery of bomb casings and fuses that the bombs represented general purpose 100-pound bombs containing the nose fuse M103 and tail fuse M-100.

Local residents like Christine Adams, whose parents homesteaded east of McCarty's Crater, remembered the exploding bombs. With the exception of frightening chickens and rattling dishes, it did no apparent harm. The military continued using the bombing range on an intermittent basis for ten months. In April 1944, Kirtland closed the range, stating the area "can only be reached by walking insofar as it is located on the extremely rough terrain of an old lava flow. Since construction and maintenance of targets is impracticable, the range is excess to the needs of this command." The condemnation settlement revested fee title to the private owners, changed the interest to a leasehold in lieu of fee simple, and released the United States from all claims arising from the government's use of the land. The public domain land was released to the Department of the Interior, Bureau of Land Management, by Public Land Order 344, dated January 29, 1947. On April 2, 1947, the bombing range officially became public domain.

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27 U.S. President. Proclamation. "Withdrawing Public Lands for use of the War Department as a Bombing Range." Federal Register. No., April 13, 1943. 4799, also in General Land Land Office, Public Land Order 108. Sections 14, 15, 16, 21, 22, 23, 27, 28, and 29 of T7N, R11W were withdrawn from public use. The nine square miles comprised three tracts of land. Sections 15, 21, 23, and 27, owned by the New Mexico-Arizona Land Company, and Section 16, property of the State of New Mexico were removed from the public domain under a Petition in Condemnation under the War Powers Act (Title 50, Section 171, U.S.C.A.); also removed were Bureau of Land Management administered lands. Sections 14, 22, 26, and 28. see United States v. 5760 Acres of Land. More or less. Situate in Valencia County. New Mexico; And New Mexico and Arizona Land Company, ET AL. U.S. District Court. District of New Mexico. Civil Action 512. June 15. 1943. copy in Superintendent's file El Malpais National Monument.


Chapter VIII

The U.S. Army in restoring the land to the private and public sector endeavored to locate all unexploded bombs. The stipulation filed in U.S. District Court for New Mexico on November 14, 1944, stated: 'It is understood by the Defendant that the United States of America has policed and made an earnest effort to clear the property hereinabove described of all unexploded bombs; however, the Defendant agrees that it is impracticable to locate all unexploded bombs on said lands hereinabove described and . . . the defendant agrees to, and does hereby for itself, its successors and assigns, release and forever discharge the United States of America from any and all claims of whatsoever kind or character that may arise from injuries to person or damage to property resulting from the explosion of unexploded bombs left remaining on said lands by the United States of America.'

But the army continued to show concern for public safety in the defunct bombing range. In 1953, the military returned to the lava bombing range to salvage all remaining metal and to search for unexploded bombs. Ordnance experts combed the range and found approximately 80 tons of scrap metal. Capt. Edward W. Kerwin reported that the former range, 'is safe and free of dangerous and/or explosive materials.' But the discovery of bombs continues. Local malpais resident, Sleet Raney, escorted Bureau of Land Management Range Conservationist, Les Boothe, to McCarty's Crater in August 1986. They found two unexploded bombs intact in trees 200-300 yards from the crater. At the request of the Bureau of Land Management, the 41st Ordnance Detachment Fort Bliss, Texas, inspected the site. The two 100-pound bombs were detonated. An on-site staff sergeant indicated that from other bomb fuses found in the vicinity, more live bombs are probably in the area. This sentiment is shared by local ranchers, who claimed discovery of bombs 5-6 miles from the impact site. Rio Puerco Resource Area Manager, Herrick Hanks, requested in a letter of January 1987 to the Department of the Army Explosive Safety Board that the military "conduct a surface clearance," a request that never materialized. In 1990, more bombs were discovered.

The end of World War II witnessed agriculture and mining as the two largest employers in the malpais region. By 1950, the population of Grants leveled off at 2,500. The community established itself as the trading center for nearby ranchers, miners, and the few timberman still involved in logging operations. More importantly Grants surpassed San Rafael as the regional commerce center. People from communities like San Rafael, Prewitt, Bluewater, and the few remaining homesteaders on the flanks of the malpais now focused on Grants for business.

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33 In a "Certificate of Clearance" letter, Captain Edward W. Kerwin, 9800 TSU-CE Detachment No. 12, Engineer-Range Clearance Team reported on August 12, 1953. "All metal and military scrap, approximately 80 tons (160,000 lbs) stockpiled at center of former Kirtland Air Force Bombing Target N-11 . . . is safe and free of dangerous and/or explosive materials and can be used or transported in any way for which the metal is suited, see "Captain Edward W. Kerwin's "Certificate of Clearance" letter August 12, 1953. Superintendent's file El Malpais National Monument.


In 1950, the malpais region experienced its greatest cycle of boom. Navajo sheepherder, Paddy Martinez, discovered uranium north of Grants. Martinez's discovery touched off a wave of miners and companies to the area. By 1960 Grants' population escalated to 10,274. Many locals found work in the mines. With the increase in population, demand for additional services grew. Banks, schools, hospitals, libraries, and a community college were developed or established during the height of the uranium industry. State Highway 53, graveled in the 1930s became a paved highway in the 1960s. About the same time Interstate 40 through the malpais was built. Grants continued to grow. According to the 1980 census, Grants reached its highest population of 11,451. West of Grants and beyond the city limits, the town of Milan supplied a supporting population of 2,700.\textsuperscript{37} On June 19, 1981, Grants and the malpais region separated from Valencia County and formed part of Cibola County with Grants as county seat.\textsuperscript{38} The decade of the 1980s, however, was cruel to Grants and the region. Demand for uranium dropped. The economic recession that followed did nothing to revitalize the sagging fortunes of the malpais. Grants lost population and businesses folded up.

Railroad, livestock, timber, and uranium, played major roles in the development of the area. Yet, they all proved to be unstable in providing a long-term buffer from economic recession. Ambitious homesteaders had hoped to beat the odds and make a decent living from the land. Had they reviewed the history of the region, they would have discovered that climate and terrain were the dominant masters rendering the area less than conducive for agricultural pursuits.

Tourism was perhaps the one economic business in the malpais that lacked development and exploitation. The management of the natural and cultural resources in the study area for public use and enjoyment was on the threshold of discovery as the malpais entered the second quarter of the twentieth century.

\textsuperscript{37}Ibid.

\textsuperscript{38}Ibid.
CHAPTER IX
TOURISM AND THE ESTABLISHMENT OF A NATIONAL MONUMENT AND NATIONAL CONSERVATION AREA

Could tourism become the mechanism for expanding the malpais region's economic base? Before 1925, the idea was embryonic. However, with the advent of affordable and efficient automobiles, and the paving of major arteries (U.S. 66 through Grants received a hard surface coating in the 1930s) the public took to the highways in unprecedented numbers. Prominent natural and historic landmarks like the Grand Canyon, Aztec Ruins, Petrified Forest, Chaco Canyon, and El Morro National Monument enticed and beckoned travelers to visit the wonders of the Southwest.

From the earliest Indian inhabitants to the first bedraggled, dusty motorist who drove into William Thigpen's motel in Grants in the 1930s, the lava flows and perpetual ice caves near Bandera Crater had puzzled and aroused curiosity. El Morro National Monument custodian, Evon Z. Vogt, a man of visionary ideals, possessed more than a budding interest in the ice caves. As early as 1934, Custodian Vogt penned a note to Arno B. Cammerer, Director of the National Park Service, expressing his fears over the loss or removal of ice from the caves. Vogt complained that locals and homesteaders alike frequented the cave in the summertime, packing away hundreds of pounds of ice. Unless something was done to protect the area Vogt asserted, all the ice would disappear. An advocate of preservation, Vogt's ultimate proposal recommended protection for the ice caves by planting them under the jurisdiction of El Morro National Monument as an addition to the park. At the minimum, Vogt urged, "The combination of this virgin forest, the Ice Caves, the intriguing wild lava bed, where the experience of discovery can always be had, presents what we think should be set aside in an area of recreation."

Those same words dripped from the pen of Jesse L. Nusbaum, Director of the Laboratory of Anthropology in Santa Fe. Nusbaum, in a letter to Director Cammerer stated, "Personally I think these caves and their features of sufficient importance to justify their consideration as a separate national monument, or as a part and parcel of the El Morro National Monument." To follow up on Vogt's and Nusbaum's suggestion, Cammerer instructed Yellowstone Park superintendent, Roger Toll, to examine the ice caves. On April 29, 1934, Toll visited the sites. In responding to Cammerer, Toll reported the ice caves interesting, however, they did not, in his opinion, warrant inclusion into the National Park System. He added for good measure that ice caves and lava features were already represented in three national park areas. Moreover, Toll cited that even if extra personnel were assigned to El Morro, they could not be spared to safeguard the vanishing ice. They would be needed, Toll insisted, to protect the inscriptions.

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Figure 9. Region Map of El Malpais National Monument
Tourism and the Establishment of a National Monument
and National Conservation Area

at El Morro. Because of El Morro's historical importance Toll said, he did not see any value of adding the geological features of a site separated by 16 miles of private lands from El Morro.

Toll's candid letter concluded with one bright note: "It is recommended that this area be dropped from consideration as an addition to the national monument, but that any desired cooperation be extended to the State of New Mexico if the state is interested in securing the area as a state park." Although the state expressed interest in the project, it did not possess the necessary funding to establish an ice caves state park.

Toll's report severely damaged any chance for an ice cave and lava bed monument, but it did not entirely close the door on the subject. In 1936, the National Park Service conducted still another investigation into the merits of establishing a national monument south of Grants. In April 1936, John E. Kell, Regional Inspector and Associate Landscape Architect, National Park Service, examined the lava beds and ice caves. Kell's assessment of the caves closely followed the perceptions of Toll. Kell reported: "the place [ice caves] was too inaccessible and perhaps too small an area to be considered as a park or monument."

Whereas the National Park Service did not consider the ice caves to be of national significance, local citizens and nearby papers did. Local and regional papers expressed the caves and lava as "natural" tourist attractions. The Grants Review, July 23, 1936, remarked on the tourist potential of the region within a few miles of Grants--Acoma pueblo, Inscription Rock, lava beds, extinct volcanoes, and Mount Taylor. An editorial feature in the Silver City Enterprise, while exhorting the completion of a road linking El Paso to Grand Canyon, championed the construction of a highway connecting with the chain of volcanic craters and "the largest ice caves in America." It labeled them prime tourist attractions. The paper suggested that local and state officials combine their efforts to achieve their fruition by a tourist highway.

While the National Park Service vacillated and pondered the qualities of the ice caves and lava beds, the number of visitors to the region steadily increased. Sylvestre Mirabal, sheep and land tycoon from San Rafael, owned the ice caves. Although records are sketchy, Mirabal either purchased the ice caves from the Atlantic and Pacific Railroad or through one of the timber companies who had acquired the land from the railroad. Just who discovered the ice caves is a point of conjecture. Certainly the early Native Americans visited the caves judging from the vast array of pottery found in the vicinity. According to David Candelaria, present owner

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5 Toll to Cammerer. May 15, 1934.
8 Silver City Enterprise. January 1, 1937.
9 Mr. David Candelaria, owner of the commercial Ice Caves, indicated in a telephone interview. November 23, 1988, that Mr. Mirabal purchased the caves from a timber company.
Figure 10. Vicinity Map of El Malpais National Monument.
of the ice caves, it was his great-great grandfather, Benito Baca, who first set eyes on the cave sometime in the 1880s. Baca homesteaded two miles from the cave.\footnote{Telephone interview with David Candelaria. November 27, 1988. Candelaria maintains that local tradition indicates that soldiers from Ft. Wingate located at San Rafael made frequent trips to the cave for ice. El Morro caretaker, Evon Vogt, claims an Acoma boy herding his sheep discovered the cave in 1923; Vogt to Cammerer. December 29, 1933; Jean Cody. ”Points of Interest Valencia County.” WPA Files. New Mexico State Records Center and Archives, credits Charles Fletcher Lummis with discovering the cave, while hunting bear.}

Until the 1930s, the ice caves lacked signage of any kind. During the 1930s a poorly marked trail led from the State Highway (present New Mexico 53) to the site. Access to the mouth of the cave remained an odyssey, compelling and challenging inquisitive tourists to crawl and scramble over sharp-edged lava rocks, or work themselves down improvised ladders fashioned from tree trunks and branches in order to glimpse the icy spectacle.\footnote{Toll to Cammerer. May 15, 1934, in section marked ”Supplemental Data,” page 19.} Insufficient markers and accessibility problems to the ice caves peaked in July 1938, when three Kentucky schoolteachers stopped to visit the cave. On July 20, the women parked their car adjacent to the ice cave path. Unfortunately, they missed the dim trail and became entangled and disoriented within the catacombed lava. When locals spotted the parked car the next day, suspicions mounted that the people might be in trouble. A search party failed to find the missing persons. Governor Clyde Tingley instructed the State Police to organize a search and rescue mission, eventually involving more than 100 volunteers. On July 23, search and rescue officials found the lost party alive, but suffering badly from exposure, malnourishment, lacerations, and bruises.\footnote{Albuquerque Journal, July 24, 1938: Albuquerque Tribune, July 23, 1938: Christine Jones. ”Place Names Valencia County.” WPA Files. New Mexico State Records Center and Archives, Santa Fe.}

The near-tragedy with the Kentucky schoolteachers prompted an outpouring of letters to papers and government officials to do something with the caves to prevent any further accidents.\footnote{Ibid.} In response to the episode of the lost women, Albuquerque resident and cave-preservationist Vincent V. Colby, wrote to Harold L. Ickes, Secretary of the Interior. Colby exhorted the secretary to preserve the caves before vandals from nearby lumber companies destroyed the last vestiges of ice. He also remarked on the near-fatal accident involving the teachers. Colby wrote: ”There also are no intelligent signs near by. The only small one to be noted is confusing, so much that three tourists only last week, and by misunderstanding this sign, were lost for four days without food or water. Through the greatest luck and with the help of more than a hundred searchers was it possible to find them--just in time.”\footnote{Vincent V. Colby to Harold Ickes, July 25, 1938.}

Colby’s letter found its mark, Ickes promptly formed another survey crew to evaluate the ice caves as potential national monument material. In November 1938, a National Park Service technical team from Region III (Southwest Region) comprised of Milton J. McCollm, Acting Associate Regional Director; John E. Kell, Associate Landscape Architect; Charles M. Gould, Regional Geologist; and Erik K. Reed, Assistant Archeologist, examined the area. This blue
Chapter IX

Figure 11. The Ice Caves near Bandera Crater were a geological wonder that attracted local and out of state visitors as reflected in this circa 1920 view taken by U. S. Geological photographer, W. T. Lee. In 1939, local resident Cecil Moore realized the scenic and commercial value of the Ice Caves. He leased the property from Sylvestre Mirabal. Moore put in wooden stairs to the cave as well as constructing tourist cabins and other facilities to accommodate the growing trend of tourism in New Mexico. After Mirabal’s death ownership of the Ice Caves eventually passed on to David Candelaria, Mirabal’s grandson. The Candelarias, David and his wife Cora, have continually operated the Ice Caves since 1946.

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ribbon panel produced a Special Report prepared by all three but submitted by McColm. In conclusion McColm recognized the area held "considerable interest" but questioned whether the large capital outlay required to develop and administer the park was in the best interest of the public. McColm did not feel the area suffered from a high rate of vandalism considering its inaccessibility. In summation, McColm recommended "that no action be taken toward establishing this area [ice caves] as a national monument until further and more comprehensive investigations can be made." 15

The National Park Service never followed up on McColm's recommendation, and the issue of national monument status died from neglect. In 1943, when the United States Army requested the malpais for a bombing range, the National Park Service reacted: "If it is required by the War Department as a demolition bombing range, certainly under present war conditions that need would far outweigh any doubtful potential value that the area might have as a national monument, and our position would be impossible to justify if we offered any objection to the proposed use. I recommend that the Army be advised accordingly." 16

During the 1930s and 1940s the National Park Service manifested little more than a passing interest in the ice caves and lava flows. But local homesteader, Cecil Moore, perceived the ice caves as a potentially rich tourist attraction. In 1938, Moore leased the ice caves from owner Sylvester Mirabal. Among Moore's first tasks was to upgrade the approach to the cave and construct a suitable stairway ascending into the cave. By October 1938, Moore had improved the pathway and completed a 75-foot stairway leading down to the mouth of the cave. 17 Moore envisioned expansion of the ice cave operation to include installation of a dude ranch enterprise. After completing the path and stairs, he initiated construction of a series of rustic cabins, restaurant, service station, and bar to cater to the motoring public. By June 19, 1939, Moore reported to the National Park Service that he had completed four of his cabins, as well as a restaurant, and trail approach to the ice cave. Moore completed his series of overnight cabins and even installed a picnic ground. Visitors to the Ice Caves paid 25 cents admission. The money went towards maintenance of the trail and wooden staircase. 18

Because of the deteriorated condition of Highway 53, Moore requested the National Park Service to exert any influence it had with the State in obtaining either a graveled or oiled surface highway in front of his business. This he added would make the area attractive for


16Memorandum from Regional Director, Region III, Southwest Region National Park Service to Director, National Park Service. January 6, 1943. on file with the National Park Service, Southwest Region, Division of Planning.


Figure 12. Until the paving of Route 66 in the 1930s, travel in El Malpais Country could be an adventure. Pot holes, loose livestock, and axle-deep mud were common encounters.
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Figure 13. Bandera Crater, view taken by W. T. Lee about 1920. Credit U. S. Geological Survey, Photographic Library, Denver, CO.
tourists. The National Park Service responded that it was impossible "to take any definite hand in the improving of the approach road" to his property although the Service would encourage the State to do so because of the upcoming Coronado Quadrennial. Moore remained in control of the ice caves for less than four years. Following the death of Sylvestre Mirabal in 1939, the caves remained in the Mirabal family but were still leased to Moore. Eventually, ownership of the caves passed to Mirabal's daughter, Prudenciana Mirabal Candelaria. The Candelarias, Prudenciana and Manuel Antonio, operated the Ice Caves sporadically during World War II, primarily in a caretaker status. For a while, it evolved into a cowboy camp. In 1946, the Candelarias' son, David, was encouraged to manage the ice caves. Under the management of David Candelaria and his wife Cora, the ice caves prospered and grew into a full-time operation. They added more cabins and removed the campground to avoid competition with El Morro's campground.

While the Candelarias improved their facilities, they strived to preserve the unique geological features of the area. The Candelarias waged endless battles with local and State bureaucracies to modernize the ice caves and the region. Through their efforts and others like them, they succeeded in bringing electricity to the Zuni Mountain settlements in 1955. In 1966, State Highway 53 from Grants to the ice caves was paved. This seemingly insignificant act prompted more vacationers to detour from U.S. 66 and partially constructed Interstate 40 to visit the ice caves.

While the ice caves flourished under the capable leadership of the Candelarias, another tourist facility emerged on the east side of the malpais. Local ranchers spearheaded by Mark and Ina Elkins and their close friend, Artie Bibo, envisioned the establishment of the Kowina Foundation. The goal of the Kowina Foundation was to honor the western pioneers and the rich, proud heritage of the Acoma Indians. Artie Bibo donated land for the site, and the Elkins gave charitably of their finances to erect the structure on top of Cebolleta Mesa. Dedicated May 9, 1970, the facility contained a collection of artifacts devoted to the pioneers and the area and gave visitors an opportunity to examine the extensive Indian pueblo ruins on top of the mesa. Considering publicity of the site scarcely advanced beyond the local papers, attendance remained low. Because of the death of Mr. Bibo and the failing health of Mark Elkins, the facility and all its contents were sold about 1980 to the Acoma Indians.

During the period of the Bibos and Elkins project, the National Park Service renewed its interest in the malpais. In 1969, El Malpais as it was now termed, became eligible for natural landmark status by action of the Secretary of the Interior. The National Park Service submitted "A Study of Alternatives--El Malpais" and released in 1970 and 1971 its preliminary report.

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19 Ibid.
20 Herbert Walker, Acting Regional Director, Southwest Region to Cecil Moore, June 22, 1939, National Park Service, Southwest Regional Office, Division of Planning.
22 Oral history interview with David Candelaria in his home at the Ice Caves, September 23, 1988, tape deposited at El Malpais National Monument, Grants, New Mexico.
23 Ibid.
findings. The study offered two alternatives: one, that the area continue to be managed by the Bureau of Land Management as an Outstanding Natural Area; second, that the National Park Service manage the area as a national monument. The National Park Service now deemed El Malpais' resources of "high enough quality to be considered for inclusion in the National Park System." But the report also expressed an opinion that management responsibilities could probably be best accomplished through the Bureau of Land Management, whose jurisdiction and longstanding relationship with the malpais and its inhabitants was firmly cemented. State Bureau of Land Management officers concurred with the findings and reiterated the Bureau's position, "that protection, preservation, and management of the Malpais area can be accomplished under the Classification and Multiple Use Act of September 19, 1964." The biggest obstacle to the creation of a national monument remained the status of the ice caves and Bandera Crater. The National Park Study cited that a national monument could only succeed via the inclusion of the ice caves and Bandera Crater as a nucleus of the park proposal. "To try to establish a national monument without these land resources severely undermines the suitability argument upon which the National Park Service proposal is based. The superlative interpretive story which could be told about the vivid volcanic history of El Malpais is incomplete with the elimination of these classical volcanic illustrations from that story," the study concluded. The Candelarias, indeed, did not desire to sell their beloved caves, craters, and lava beds. They pondered the future of their children. Perhaps their offspring might want to manage the operations. Moreover, while the debate about making the area a national monument raged, officials neglected to include the Candelarias in some of the discussions. On May 8, 1973, New Mexico Congressman, Harold Runnells introduced House Rules 7607, a bill to establish El Malpais-Grants New Mexico. That bill succumbed because of the influence of the Candelarias who adamantly refused to sell their property.

Meanwhile, the State expressed interest in creating a state park in the malpais. That idea southerned when the New Mexico legislature rejected the state park proposal in May 1973. Instead, the State supported a plan whereby El Malpais would be managed as a Bureau of Land Management (BLM) outstanding natural area with natural landmark status. But nothing came of the proposal.

Still Grants citizens clamored for an El Malpais National Monument. Another decade passed. Finally, with the Candelaria children now grown and not expressing a desire to manage the commercial caves, the Candelarias agreed to sell their holdings in 1986 to the National Park Service. Public Law 100-225 signed on December 31, 1987, officially created El Malpais National Monument.


Officials in Grants perceive the national monument as the cornerstone in the town’s attempt to create a new economy based on tourism. As Grants enters the 1990s, the community is embarking on an ambitious plan to get motorists from I-40 to stop and visit the nearby attractions. The economic history of Grants is a cycle of boom and bust. One hundred years ago the railroad brought opportunity to the lava country. Timber followed sheep and cattle. But they too, failed. Large scale carrot growing operations flourished for two decades before failing. In the mid 1950s uranium ushered in another wave of economic prosperity units its demise in the 1980s. In the 1990s Grants looks towards tourism as its next economic lifeline. Only time will tell whether tourism is a panacea or merely a stop gap in the perpetual up and down economic cycle that has been a hallmark of the history of el malpais. Given the prior human history, it seems fairly certain that the Indians, Hispanics, and Anglos of el malpais region can and will adjust to socio-economic fluctuations.
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Map of Fractional Townships 10 North, Range 10 West of the New Mexico Principal Meridian, Bureau of Land Management, Santa Fe, New Mexico.

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