Water, Bison, and Horses: Natural Resources and Their Impacts on Native Raids and Relations in Late, Spanish Colonial New Mexico

Dori L. Gorczyca
Gettysburg College
Class of 2015

Follow this and additional works at: http://cupola.gettysburg.edu/ghj

Part of the Cultural History Commons, Latin American History Commons, Natural Resources Management and Policy Commons, and the Social History Commons

Share feedback about the accessibility of this item.
Water, Bison, and Horses: Natural Resources and Their Impacts on Native Raids and Relations in Late, Spanish Colonial New Mexico

Abstract
During the Spanish colonial period in New Mexico’s history, the area became a place where cultural, social, and economic mixing of various Native American groups and Spanish settlers frequently occurred. Certain peoples, such as the Pueblo, lived in an agrarian society and worked in close proximity to the Spanish. Other peoples, such as the Comanche, Apache, and Navajo, developed hostile relationships with these foreigners, and their raids on the Spanish, Pueblo, and each other changed the dynamic of their settlements. Sources from Spanish and Church officials, along with travel logs, discuss the effects of natural resources, such as water and animals – including the bison and horse – on the causes of raids and subsequent effects these hostilities had on Spanish-Indian relations. The importance of water created a strong desire for nomadic societies to obtain and maintain horse-herds and for settled societies to create tight communities near water sources. The need for horses created a cycle of raiding, motivated by the need and competition for natural resources.

Keywords
Natural Resources, Environment, New Mexico, Colonial Era

This article is available in The Gettysburg Historical Journal: http://cupola.gettysburg.edu/ghj/vol14/iss1/6
Introduction and Historiography

Power, violence and trade: three concepts that comprise recent definitions and descriptions of the Spanish colonial New Mexican frontier experience during late-eighteenth and early-nineteenth centuries. Power struggles came from Spanish dominion and missionary forces in various settlements and pueblos. Violence manifested on the northern frontier of New Mexico through wars and campaigns between the Spanish and the natives, as well as internal native struggles for power and goods. Trade shaped the frontier through native commerce with both the Spanish and outside groups, such as the French and Americans. Although historians have analyzed how power, violence, and trade shaped the New Mexican frontier, the ecological factors and impacts of the indigenous raids is absent from the narrative. Robert MacCameron’s groundbreaking article published in 1994 on environmental change in New Mexico directed interest towards the relationship between land and the people of New Mexico, specifically the changes that occurred to the land due to those interactions over time. Despite the passing mention of various environmental factors within the context of the New Mexican frontier, historians have excluded a strong connection between natural resources and their influence on the development of the area. In New Mexico during the late eighteenth and early nineteenth centuries, the desire for and conflict over natural resources, primarily water and horses, directly impacted the motives and reasons for nomadic raids on Spanish and Pueblo settlements and played a crucial role in creating the settlement patterns that shaped northern New Mexico into a multi-dimensional frontier.

Multiple native groups, Spanish settlers, missionaries, and traders of various ethnicities all contributed to the formation of colonial New Mexico. In order to understand the implications of a new analysis on natural resources and raiding effects on New Mexican history, one must first trace the historiographical tradition it builds upon. The task of outlining historians’
arguments proves difficult because authors have often overlooked various ethnic groups or approached the discussion of New Mexican history with one particular focus in mind. As Natale Zappia, a historian of the area, pointed out, many of these histories “stopped at state and national borders, even though the region was interconnected by Native political, economic, and cultural exchange.”\textsuperscript{148} Over the past hundred years, historians have studied various aspects of northern New Mexico’s history, and particular chorological trends appear in the record, with three main topics: Spanish political power and policy, Native American influence, and ecological factors of colonization and settlement. The differences between authors and their scholarship over time do not necessarily lie in their arguments, but in their analytical approach to the colonial New Mexican frontier.

The historian Alfred B. Thomas, famous for his work on the New Mexican area and other Latin American frontiers, monopolized the early writings on the New Mexican border during the Spanish colonial period. Thomas translated and edited numerous documents relating to Spanish exploration, policy, and the officials’ correspondences involved in controlling New Mexico in the 1930s and 40s, primarily focusing on the time after the Pueblo Revolt in 1680.\textsuperscript{149} The historical introductions Thomas provided in the beginnings of his collections of primary source material covered broad swaths of time and did not focus on any particular theme or specific aspect of the New Mexican Frontier. The beginnings of New Mexican frontier history focused on the timeline of events and making the source material available to other historians and to the public.

Historians wrote little on New Mexico after Thomas’ work until the latter half of the twentieth century. Joseph Park and Oakeh Jones, writing in the 1960s, primarily discussed Spanish policy or conquest and emphasized a Spanish viewpoint over that of native groups; the


\textsuperscript{149} Alfred B. Thomas, trans. and ed., Forgotten Frontiers: A Study of the Spanish Indian Policy of Don Juan Bautista De Anza Governor of New Mexico 1777-1787 (Norman: University of Oklahoma Press, 1932); Alfred B. Thomas, trans. and ed. After Coronado: Spanish Exploration Northeast of New Mexico, 1696-1727 (Norman: University of Oklahoma Press, 1935); Alfred B. Thomas, trans. and ed. Theodoro de Croix and the Northern Frontier of New Spain 1776-1783 (Norman: University of Oklahoma Press, 1941); Thomas also wrote Governor Mendinueta’s Proposal for the Defense of New Mexico, 1772-1778, another example of this type of early scholarship, though this book will not be used in my own analysis. Thomas studied under Eugene Bolton, one of the most prominent historians on American history in the context of other nations; he developed this theory known as the Bolton Theory. Bolton was a student himself of Frederick Jackson Turner, one of the first historians to write on the “frontier,” which will be discussed below. The concept of providing broad context to studying a specific place influenced Thomas’ research and scholarship on the New Mexican frontier. Edward H. Moseley, et al., “The Ideas and Influence of Alfred Barnaby Thomas: A Second Generation Bolotonian,” Secolas Annals 23 (1992): 5-22. The uppercase Pueblo refers to the ethnic group while the lower case pueblo references the Pueblo people’s settlements.
analyses were more political than social.\textsuperscript{150} The American Indian movement during this same period brought more inclusive historical studies of New Mexico to the forefront. John L. Kessell’s book on the Pecos Indians of New Mexico heralded the beginning of historical interpretation on social groups, native culture, and the importance of the people and their interactions to the history of a place.\textsuperscript{151} The 1990s brought a resurgence to the field of New Mexican scholarship. Historians have continued to follow Kessell’s research program by placing their discussion of Spanish policy or conquest in the context of the socio-political influence of the indigenous population.\textsuperscript{152} Violence on the New Mexican frontier also became popular with historians who connected it with cultural and social developments.\textsuperscript{153}

Scholars were mostly silent on the subject of environmental history in New Mexico until the larger environmental movement in the 1970s. The affects and importance of water, stock animals, grazing, and modern gulling all contributed to this emergent area of scholarship.\textsuperscript{154} Robert MacCameron’s paper – noted earlier – on the environmental history of New Mexico in 1994, took the first steps towards bridging the gap between environmental analyses and more historically focused topics.\textsuperscript{155} In the 2000s, historians began to address environmental components of their historical analyses in relation to frontier policy, diplomacy, and social relations. Pekka Hämäläinen, Ned Blackhawk, and Natale Zappia are examples of modern historians with a more holistic approach to their studies of the Spanish colonial period.\textsuperscript{156} Their

arguments do not derive from a purely environmental or ecological standpoint, but instead draw heavily on the influence of natural resources on native raids of in the borderlands of New Mexico. These articles demonstrate the transition towards a multi-disciplined approach to frontier history, especially in regards to economics and diplomacy between native groups and Spanish settlers. This recent scholarship represents a new way of analyzing New Mexican colonial history, approaching the interpretation with a broad scope of research.

One of the most recent pieces of scholarship criticizes previous authors and their obsession with the frontier. As Hämäläinen and Truett boldly state, “Americanists run the risk of loving borderlands to death.” 157 The two authors advise borderland historians to focus on the “entanglements” of the frontier history, instead of attempting to “unravel” it.158 Frontier, as it appears in the context of this analysis, describes the area where various groups of people work against or with one another for survival, along with the relationships between groups, with formal borders or boundaries influencing these interactions. Although various authors have written in an effort to untangle the forces that drove the formation and shaped the interactions on the frontier, none have worked towards an overarching understanding of the various ways in which natural resources affected native raids on settlements and their influence on the formation of social relations and structural features on the frontier. As Hämäläinen and Truett suggest, this study considers the larger picture and the impact environment and native raids had on northern New Mexico during the Spanish colonial period. Raids themselves represent the conflict, tangled alliances, and peaces formed between the various groups.

At various times in New Mexico’s history, certain groups sought out or were forced to accept peace agreements with the Spanish. The Spanish had resided in New Mexico since the sixteenth century. Utilizing missionaries as the primary source of conquest, the Spanish attempted to pacify and incorporate the Pueblo Indians.159 In 1680, the Pueblo people revolted, overthrowing Spanish control of New Mexico until 1690 when a new Spanish governor pacified the region.160 During the late-eighteenth and early-nineteenth centuries, the Spanish attempted a different approach that was based more on military force than missionary influence. Spain

159 “Pueblo” is the name of a group of Native Americans, but is also utilized as the term for the settlements in which the Pueblo people lived. The name Pecos is also used in various scholarly articles for the Pueblo people, based on an Europeanized version of a population pueblo village. For this analysis, the capitalized Pueblo indicates the people, the lowercase pueblo indicates the Pueblo settlements. Kessell, “Kiva, Cross, and Crown,” 6-7.
placed a limited number of troops on the northern front of their New World Empire, which stretched from California to Texas. Only twenty-two presidos (a garrison-type center) existed containing a total number of men numbering slightly under one thousand.\textsuperscript{161} With such a limited number of forces on the frontier, New Mexico fell under the hostilities of various nomadic Indian groups. As a way of bolstering these limited military numbers, the Spanish utilized the Pueblo people, as well as other Native American tribes who entered into peace agreements. The Utes, Apache, Navajo, Comanche, Mojaves, and Yokuts acted as powerful players on the frontier, both as raiders of the Spanish and Pueblo settlements and as Spanish allies at various times.\textsuperscript{162}

From 1705, when the Spanish first observed large groups of Comanche people venturing into New Mexico, to the mid-1780s when Bautista de Anza, the governor of New Mexico, made peace with them, the Comanche undertook numerous raids on Spanish settlements and pueblos. The Comanche people, although nomadic, mainly resided to the east and north of colonial New Mexico. For the first half of the eighteenth century, the Ute people, another nomadic tribe who resided on the New Mexican border, allied themselves with the Comanche and their combined forces harassed the settlements, taking captives and livestock.\textsuperscript{163} After the Comanche grew stronger due to the raids and their bison-based economy, the Ute became less useful to the alliance and sued for peace with the Spanish in the middle of the century. These peace settlements with the Comanche occurred over the years 1785 and 1786.\textsuperscript{164} After establishing peace with the Comanche, the Apache became the next prominent threat to New Mexico. The Apache people, who came from Southern New Mexico, did not make peace with the Spanish until the very end of the eighteenth century and into the beginning of the nineteenth.\textsuperscript{165} Many of these conflicts between native groups and settled people stemmed from issues of water availability; contemporary maps demonstrate the importance of water to New Mexico.

\textsuperscript{161} Jones, \textit{Pueblo Warriors and Spanish Conquest}, 8.
\textsuperscript{162} Zappia, “Indigenous Borderlands,” 196.
\textsuperscript{163} Blackhawk, “The Displacement of Violence,” 736-737.
\textsuperscript{164} Thomas, \textit{Forgotten Frontiers}, xv.
Water: Life’s Little Necessity

A 1779 map of the Interior Province of New Mexico, made in Santa Fe, highlights the stream systems and river valleys, along with water’s importance, in incredible detail. The Rio Grande runs directly through New Mexico, north to south. The map details this major river, along with various other smaller tributaries and the location of villas, pueblos, and other settlements. The writing “enemigos Cumanchis,” Comanche enemies, appears along the right side of the map.\(^{166}\) In small print, at the bottom of the map, the cartographer indicated the “Frontera y principio de le sierra de Jila.”\(^{167}\) This translates to “Frontier and the beginning of the Gila [Apache].” The map places the Comanche and Apache Indians into their location in relation to the eighteenth century Spanish province of New Mexico.

One of the striking aspects of this map is the close association of the settlements to the Rio Grande and the river valleys that drain into the Rio Grande. The map demonstrates a clear pattern of civilization on the banks of the various streams and dense habitation in and along the river valleys of New Mexico. No settlement, Pueblo or otherwise, falls in an area without a water body nearby.\(^{168}\) The dearth of settlements near a water source provides insight into the valued commodities for the people living in the area at the time, namely agriculture. The reliance on water also begs the question of how nomadic tribes, such as the Comanche and Apache, dealt with the lack of a permanent settlement near a water source. For instance, the Pueblo had historic water conflicts. Large Pueblo migrations of the 14th century, as an example, resulted from arroyo cutting and the destructing of irrigation techniques in the previous century.\(^{169}\) The map’s focus on the water systems in New Mexico illustrates the need for a more extensive analysis on the role of natural resources in the raiding culture.

Life revolved around water in New Mexico. All accounts related to native raids during this time period mentioned water, often repeated multiple times. When Bautista de Anza undertook an expedition in 1779 to rid the province of Comanche raiders, water appears ten separate times in the space of nine journal entries, spanning four printed pages. On the seventeenth of August, the expedition crossed the Rio del Norte; on the eighteenth, they stopped

---

\(^{167}\) Pacheco, “Map of the Internal Province of New Mexico, 1779,” 2-3.

\(^{168}\) Pacheco, “Map of the Internal Province of New Mexico, 1779,” 2-3.

at the Rio de Las Nutrias; they spent the night of the nineteenth at the Rio de San Antonio, and so on.\textsuperscript{170} An expedition in 1776 undertaken by Father Domínguez and Vélez de Escalante also focused on water. From July twenty-ninth, when they started their journey from Santa Fe, to August fifth, when they reached the New Mexico-Colorado border, they wrote about water in every single journal entry, often more than once per entry.\textsuperscript{171} The explorers specifically mentioned “dry arroyos” - a creek bed that is often dry, but can fill with water after rain – on August first, second, third, and fifth.\textsuperscript{172} As indicated by the explorers’ encounters of these often dry arroyos at least once a day while traveling through New Mexico, the Spaniards not only valued water enough that it consistently made it into journals and records, but the water itself was often difficult to obtain. Both Bautista de Anza’s diary and the Domínguez and Escalante diary tracked their progress through New Mexico based on their location in relation to water sources.

The villages of sedentary groups in New Mexico depended on streams. Communities and societies in New Mexico relied upon the water system, and both the Spanish and the Pueblo adopted certain European irrigation techniques for agricultural practices. Each settlement had a small stream for watering the fields.\textsuperscript{173} An American explorer in the early 1880s noted, “the necessity of irrigation has confined…agriculture principally to the valleys of the constant and flowing streams.”\textsuperscript{174} If a location, such as Cañada, did not permit access to irrigation water, that lack exposed them to frequent famine.\textsuperscript{175} From the countless mentions and references made regarding access to water by travelers to the creation of towns and villages based on the irrigation needs, the sedentary population of New Mexico relied on water for sustenance. From

\textsuperscript{170} “Rio” indicates river in Spanish. Thus, most of the movements and stops of Bautista de Anza’s troops were qualified by their placement near water bodies. Bautista de Anza, “ Diary of Governor Anza’s Expedition Against the Comanche National, August 15-September 10,” in \textit{Forgotten Frontiers: A Study of the Spanish Indian Policy of Don Juan Bautista de Anza Governor of New Mexico, 1777-1787}, ed. and trans. Alfred B. Thomas (Norman: University of Oklahoma Press, 1932), 123-126.


\textsuperscript{172} Domínguez and Escalante, “Itinerary and Diary,” 5-9.


\textsuperscript{175} Fray Juan Agustín de Morfi, “Geographical Description of New Mexico,” in \textit{Forgotten Frontiers: A Study of Spanish Indian Policy of Don Juan Bautista de Anza Governor of New Mexico, 1777-1787}, ed. and trans. Alfred B. Thomas, 87-114 (Norman: University of Oklahoma Press, 1932), 99. The area, as described by Father Morfi, contained excellent land for pasture and fields for cultivation, but that lacking a consistent water supply opened the settlement to vulnerability.
the analysis of water’s importance to these sedentary groups, water resources must also have been a vital concern for nomadic societies, such as the Comanche, Apache, and Ute. Understanding the need for stable water supplies contributed to the understanding of raids by these nomadic people. The historian Frances Leon Quintana stated that working towards improving irrigation and “the shared struggle for survival against frequent incursions of nomadic Indian” helped foster friendship and peace between the Spanish and the Pueblos, though she failed to mention the impact of water on the nomadic incursions themselves.  

The importance of water and horses became apparent early on in the history of the New Mexican province. In the early seventeen hundreds, the Spaniards held a council of war against the Faraon Apache. In explaining the reasoning for fighting against this group of Apache, the governor of New Mexico stated that the Faraon Apache committed “thefts of animals” in both the Santa Fe and Cañada districts. He went on to write that if anyone were to visit the land of the Apache, they would find a land filled with dry grass and “many mules and horses in their possession which [the Apache] have stolen from [Santa Fe].” To travel to the land of dry grass of the Apache, one had to traverse an area with no roads and no sufficient areas of water for five days. The nomadic Apache desired the horses and mules because they saw it as a natural resource that they could utilize in a dry land with limited rainfall and numerous bison. Although MacCameron wrote that raiders longed for horses because of the ease of which horses could be herded from the settlement, the horse could also help Apache “search for and kill bison with exhilarating ease and travel farther to trade, raid, and wage war.” For the Spanish, the raids carried off an important resource to them and posed a threat large enough over which to wage war. The mention of both dry grass and stretches of land without significant water implies the importance of water to those living in New Mexico. For the Apache, raiding for goods and

---

177 Don Juan Ygnacio Flores Mogollón, “Council of War, Sante Fé, July 20, 1715” in *After Coronado: Spanish Exploration Northeast of New Mexico: 1696-1727*, ed. and trans. Alfred B. Thomas (Norman: University of Oklahoma Press, 1935), 80. It is interesting to note that on the map of New Mexico published in *The Missions of New Mexico, 1776*, the areas of Sante Fe and Cañada are located in the northern section of the province, away from the area labeled with the name “Jila.” Pacheco, “Map of the Interior Province of New Mexico,” 2-3. Because there are multiple groups of Apache people and due to the difference in time, it is not unlikely that the Faraon Apache raided in those northern areas.
179 Mogollón, “Council of War, 1715,” 80.
180 MacCameron, “Environmental Change in New Mexico,” 22; Hämäläinen “The Rise and Fall of Plains Indian Horse Culture,” 836.
horses would improve their lifestyle in a location where they depended on the horse for fast travel between stretches of dry land and better hunting opportunities. As demonstrated by the 1779 Pacheco map and the description of dry areas, natives and Spanish depended on water for sustenance and this reason held constant throughout time in New Mexico.

An example of the connection between nomadic raider hostilities, horses, and the importance of water for sustenance comes from the description of a map made by Pacheco, the same mapmaker as mentioned previously, in the 1770s. Pacheco created the map to display the area where the Spanish had proposed placing a new presidio. He identified the proposed location as a place with “good water resources for farming and many convenient places for pasture, firewood, and timber,” but that it “must necessarily be very strong because of its location in the midst of the habitation of the enemy Apaches.” Pacheco drew a connection between a location beneficial to the Spanish because of access to natural resources, but also expressed fear that these good resources may draw raids from the Apache people. The map description also adds evidence to the theory that rivers and water directly impacted settlement in New Mexico. The Spanish believed that if they could place a successful presidio at the specified location, the Rio Grande “could easily be populated all the way from New Mexico down to El Paso.” The sedentary people of New Mexico concerned themselves with creating areas with easy access to water, though nomadic raiders also desired the same natural resources.

**Livestock**

As alluded to previously, both the Spanish and pueblo settlements and the nomadic Indians coveted livestock. The interaction between the raiders and the livestock raised by the Spanish and pueblo settlements created a dynamic that shaped the New Mexican frontier economy. Sheep became one of New Mexico’s greatest commodities. While raiders could drive horses and cattle away easily, sheep would simply scatter and the Spanish and Pueblo could therefore quickly recover them. Father Domínguez and Escalante also emphasized the excess of the good pastureland they passed through as they made their way northward towards Colorado. The entries from August second, third, fourth, fifth, seventh, and eight all mention

---

“abundant pastures,” or areas “very abundant with pastures.” For the Spanish and Pueblos, these pastures became the ideal land on which to raise sheep. According to Pike’s estimates in 1807, New Mexico annually exported over thirty thousand sheep. The raids, the desire for horses by native groups, and the environment - which promoted pastureland - all contributed to the emphasis on livestock, particularly sheep, goats, and mules. Because of the raider’s focus on horses, raising sheep and goats became more lucrative for settled Pueblo and Spanish people, an example of ways in which raids shaped the social economy of New Mexico. A poignant statement about the land available for grazing in New Mexico comes from Josiah Gregg, an American explorer and trader, who traveled the southwest in the 1830s. Gregg published a book on his observations in 1844, claiming:

The most important indigenous product of the soil of New Mexico is its pasturage. Most of the high table-plains afford the finest grazing in the world, while, for want of water, they are utterly useless for most other purposes. The scanty moisture which suffices to bring forth the natural vegetation is insufficient for agricultural productions, without the aid of irrigation.

Gregg, writing in the period after Spanish officials had subdued natives, made it clear that the raids and the lack of water for irrigation spurred the vast number of sheep as described by Pike in the early nineteenth century and highlighted the importance of pastureland as New Mexico’s best feature. For many historians, when discussing the commercial and economic impact of these raids, the dialogue focuses on horses and cattle, not sheep; for the New Mexicans, natives raiding specifically for horses and the scarcity and competition for water meant the people developed and cultivated other commodities instead.

A substantial portion of the livestock in Spanish colonial New Mexico consisted of goats. When Spanish colonists introduced goats to North, Central, and South America they quickly became the “poor man’s cow,” surviving best in areas with poor vegetation; natives, such as the

---

184 Domínguez and Escalante, “Itinerary and Diary,” 5-11. It should be noted that in many locations where sheep prosper, the land itself can experience degradation due to intensive grazing by livestock such as sheep and goats. This process proves poignant in the changes seen in Mexico because of the introduction of grazing animals by the Spanish. Gulllying and erosion, two processes that are linked with water scarcity, resulted from overgrazing and environmental degradation in Mexico. Elinor G. K. Melville, A Plague of Sheep: Environmental Consequences of the Conquest of Mexico (Cambridge: Cambridge University Press, 1994), 114.
185 Pike, Exploratory Travels, 304.
186 Gregg, Commerce of the Prairies: A Selection, 52.
Pueblo and other Southwestern Indian groups adopted the goat as well.\textsuperscript{187} The number of livestock, primarily composed of sheep and goats, reflected the impact raids had on the number and type of animals the New Mexicans raised. In 1697, New Mexico had only 4,000 sheep; in 1757, there were 112,182 sheep and goats; in 1779, there were 69,000 sheep; in the 1820s, there were 240,000 sheep and goats.\textsuperscript{188} The beginning of native raids in the early eighteenth century and the realization that raising sheep and goats had benefits over horses and cattle, such as ease of collection after raids, accounted for exponential increase in sheep and goat numbers from the late seventeenth century to the mid eighteenth century. Additionally, the height of Comanche raids, based on Baustista de Anza’s decision to pursue peace with the group in the late eighteenth century, corresponds to a decrease in the upward trend in livestock numbers. The change in livestock numbers in New Mexico demonstrate the realization that sheep and goats are more useful in a society living under threats of hit-and-run raids, as well as how the raids themselves resulted in a loss of a key food source and commodity.

\textbf{The Bison and the Horse}

Although the bison cannot be classified as “livestock,” they too played a vital role in shaping the horse culture of the plain Indians, the subsequent raiding on the New Mexican border, and the ultimate interactions on the frontier. In 1812, Pedro Bautista Pino wrote about New Mexico, describing various aspects of the province, ranging from its history to geography to the Indians to the natural resources.\textsuperscript{189} Pino emphasized the importance of the meat and skin of the bison to the people of the area, citing the animal as “more important and more profitable” than any other smaller game in New Mexico.\textsuperscript{190} Although he described it with the interests of

\begin{itemize}
\item\textsuperscript{187} Dan Scurlock, “A Poor Man’s Cow: the Goat in New Mexico and the Southwest,” New Mexico Historical Review 73 (1998): 10-11; Columbus first brought goats to the Caribbean islands on his second voyage to the ‘New World,’ and from this, subsequent Spanish explorers and settlers introduced the goat to various lands as they moved up and down the Americas. Scurlock, “A Poor Man’s Cow,” 10.
\item\textsuperscript{189} Pino wrote the account along with a co-author and consulter, and though the account never explicitly named a co-author, the editor to a 1942 edition believed it to be a man named Juan López Cancelada. Pino and Cancelada composed the report in response to a call from Spain to assess the province of New Mexico due to Spain’s own weakness as an empire at the time. In 1849, the account was published, with two additional commentators from later dates. For this analysis, only Pino’s original observations in 1812 will be utilized. “Editors’ Introduction,” in Pedro Bautista Pino, Three New Mexico Chronicles: The Exposición of Pedro Bautista Pino, 1812; the Ojeada of Anonio Barreiro, 1832; and the Additions of José Agustín de Escudero, 1849, eds., H. Bailey Carroll and Juan Villasana Haggard (Albuquerque: Quivira Society, 1942), xv-xvii.
\item\textsuperscript{190} Pino, Three New Mexico Chronicles, 99.
\end{itemize}
the Spanish crown in mind, as Pino was a New Mexican delegate to the Spanish Crown, this importance and profitability of the colony most likely applied to both the Spanish settlers and the natives of the area.

Bison changed the way that western Indian societies operated as well. The American Southwest had not always sustained bison populations; after a severe drought ended in the fourteenth century, the area underwent a period with a more cool and wet climate, which correlated to a rise in bison populations. Between the late seventeenth century and the late nineteenth century, around thirty-five Native American groups adopted a bison-hunting culture. According to Pino’s report, the “wild Indians” killed thousands of bison each year and, specifically referencing the Comanche people, they “spend their time hunting the bison.” The bison represents ‘traditional’ Native American in popular culture, and though the perception of Native Americans during the twentieth century often carried incorrect connotations, the bison acted as a crux for many Plains Indian societies. The importance of the bison society created a need for an additional natural resource, the horse, which raiding New Mexican groups (the Comanche, Ute, Navajo, and Apache) coveted.

The horse held a place of high esteem in New Mexican culture. For the Comanche people, the horse became the means to maintain the culture that developed around hunting the bison. Early in the 1700s, Spaniards recognized that because the nomadic Indians “live where there is hunting” they subsequently relied on the horse to carry out their livelihood. Many of the nomadic tribes around New Mexico adopted a way of life that centered on the bison. Pueblo Indians who had left Spanish control taught the Apache people how to ride and utilize horses by the 1650, and by the early eighteenth century, the Ute people taught the Comanche and the Comanche-Ute alliance allowed a flourishing of the horse culture. The increase in bison and the switch to a bison-centered culture for various native groups - such as the Comanche and Apache – developed a need for horses designed for swiftness. Thus, the logical step for these

---

193 Pino, Three New Mexico Chronicles, 102; 130.
194 Mogollón, “Council of War, 1715,” 81.
195 The horse changed the way that Native groups performed various activities, such as trading, hunting (as described above), and waging war. It is important to note, though, that the horse also changed the social structure of various nomadic societies. The horse created disruptions in gender relations, changed political and social hierarchies, and created more intense competition for resources. Hämäläinen, “The Rise and Fall of Plains Indian Horse Cultures,” 836-837.
societies became raiding the Spanish and Pueblos for horses. Countless accounts from New Mexico during the eighteenth and nineteenth centuries describe horses as one of the resources for which natives consistently raided both permanent and nomadic settlements.

Spanish settlers and officials understood the connections between the horse, hunting bison, and the raids on Spanish and Pueblo settlements. Early in the eighteenth century, before the raids on New Mexican settlements came to their peak, natives raided in order to capture horses. A second council of war in 1715 described a need to go to war against the Apache. A chief of one of the presidios cited the theft of the entire horse herd from the Picuríes Pueblo, and that the Apache had stolen horses at various other times as well.196 This incident demonstrated the universality of these raids; The Apache raided a pueblo, not just some Spanish settlement, indicating that they had a desire for horses more so than just a desire for resistance against the Spanish presence. Instructions made by presidio officials to the commander of the resistance against the Apache again highlights the importance of the horse, both to the raiders and to the expedition itself, as well as enforced the purpose of the raids as robberies for horses, not personal attacks. The Spanish officials warned the officer to protect the horse herd so they did not lose it, and also to not kill women or children but instead to punish those Apache who committed the robberies.197 Ever since the raids began in New Mexico in the early parts of the eighteenth century, the natives focused on the horse and the Spanish recognized and acknowledged this motive. Again, the desire for horses directly corresponds to the bison culture that developed for the Comanche, Ute, Apache, and Navajo, whereas the settled Pueblo people had no need to participate in the raids and became the victims along with the Spanish.

**Raidding and Trading**

The bison and horse became two of the central players in the cycle of raids, which fed a larger cycle of trade between the Spanish settlers and nomadic groups. The Pueblo and Plains Indians had participated in a trading cycle for at least a hundred years before the Spanish arrived in the area, and once the Spanish did arrive, they became incorporated into the trading patterns

---


Eventually, all three groups - the Pueblo people, native nomadic groups from the plains and the Spanish - became reliant on the trade of one another. With increased trade with the French and English, native access to guns increased the violence and changed the trading dynamics. What developed out of these conditions became a trading-raiding cycle. Nomadic groups would raid for goods and supplies, primarily livestock and horses, which natives used for hunting and resold the goods to the Spanish. Because of the growing reliance on European goods, plains Indians would raid in order to complete their balance of trade. Specially, the Comanche people gained horses from the Spanish. This development of a horse-culture led to their development of a trade economy based in bison and deer with other European nations in the Americas. The Comanche people traded these goods for horses, metal wares, and guns. This encouraged them to raid sedentary settlements more to gain horses and human captives.

Native groups strove to acquire more goods for a favorable balance of trade, resulting in raids on Spanish and pueblo settlements for more horses to not only increase their hunting capability but also to increase their strength to conduct raids.

Raid continued throughout the eighteenth century, with the horse as the focal point, as accounts from the 1770s established. The Apache continued to seek out horses through raids later in the eighteenth century. Phelipe De Neve, the commander who oversaw attacks on the Apache at this time, made the plans for his campaign in mind that “it is most important to secure advantages over an enemy to whom flight is the greatest defense [...].” Neve explained the horse as the Apache’s main way of transportation and device for warfare. The Comanche people required horses for their lifestyle as well, and Bautista de Anza, the governor of New Mexico, acknowledged the reliance the Comanche had for their horses numerous times. In his diary of his expedition against the Comanche, Bautista de Anza echoed the ideas and thoughts of Neve when he wrote that his plan aimed “to fatigue as much as possible the horses of the enemy, in whose swiftness [they] placed [their] confidence for attacking and escaping [...].” From what

199 Works, “Creation of a Trading Place,” 273-274.
203 Bautista de Anza, “Diary of Governor Anza’s Expedition,” 135.
Baustista de Anza stated, it is clear that the Comanche utilized their horses for raiding as well as an object to obtain through raiding.

As Anza’s company proceeded, a group of friendly Ute Indians joined with them. The Ute explained that barely a month before the Comanche had “attacked a greater force of Ute who were camped there with their families…the former succeeded in the darkness of the night in capturing all the Ute horses.” Just like the example of the Picuríes Pueblo, raiders targeted the Spanish and Pueblo as well as other nomadic groups as a potential resource for horses as well. For the Comanche and others that raided the New Mexican border, the identity of the victims was not important, only the outcome: gaining horses and supplies. Not only did Baustista de Anza write about the Comanche’s trust on the horse, but also the importance of the horse to his own means. Before militia and accompanying Pueblo Indians set out against the Comanche, Bautista de Anza provided his troops with three horses each and gave any Indian or poor settler who lacked enough horses a spare mount from the extra herd he himself kept.

Because the enemy relied on horses to fight their opponents and it proved a fast way to travel between the scare water sources, the horse became a vital aspect of the Spanish and Pueblo lifestyle in response to the method of raiding utilized by the Comanche and Apache.

The issues of raids on the New Mexican communities concerned religious figures as well as political ones. In 1775, Fray Francisco Atanasio Domínguez, who compiled a description of all the New Mexican missions and also undertook the 1776 exploration with Escalante, wrote a letter to the Provincial Fray Isidro Murillo explaining the situation and asking for guidance. Domínguez expressed distress over the theft of all the horses and mules from various pueblos, referring in particular to the Presidio of Janus where the Apache took the entire herd of horses. Domínguez pointed out an issue that those in New Mexico faced when it came to protecting themselves from the raids; “But if when they [the military] seek the raiders in one place, they are already in another, how are they going to grapple with them?”

The nature of the raiders created a paradox where the horses allowed the natives to be swift in their raids and

---

204 Bautista de Anza, “Diary of Governor Anza’s Expedition,” 127.
205 Bautista de Anza, “Diary of Governor Anza’s expedition,” 123.
207 Fray Francisco Atanásio Domínguez to Provincial Fray Isidro Murillo, November 4, 1775, The Missions of New Mexico, 273.
maintain a nomadic society, but created a reliance on the horse, in turn creating a motive to raid for more mounts in the first place. The problem of nomadic raiders revolved around the horse as a natural resource and drove both the causation and potential solutions.

Horses continued to affect raiding into the nineteenth century. Lieutenant Zebulon Montgomery Pike described the deserted villages and towns, due to the Comanche raids. He specifically cited the Comanche, “subsisting solely by the chase,” carrying off two hundred horses from one particular village. More intriguing is Pike’s description of a peace meeting between Spanish officials and the Comanche. He claimed that that the Spanish leader came with “five hundred men all on white horses, excepting himself and his two principle officers, who rode jet black ones,” evidence for the importance of the horse as a natural resource and symbol of status and wealth for the Spanish as well as the native people. Pike also described Apache hostilities at the time during his travels. He wrote that the Apache lived a “wandering and savage life…which is so injurious to an increase in population, and in which they are extremely pinched by famine.” The commentary alluded to the coming decrease in bison populations - caused by the environmental degradation from agricultural practices and climatic changes – which influenced population size and spurred famines for various native groups. Frequent famines, such as described by Pike, led groups such as the Apache to raid permanent Spanish settlement and pueblos further to procure more horses and goods from places with stable and sustainable irrigation designs. The raids for subsistence have connection with water availability as well.

Writing at the end of the period in question, Josiah Gregg, author of Commerce of The Prairies, also addressed the role of the horse in New Mexico. His account provides a way of looking back at the time when natives raided more frequently; by the 1840s when Gregg traveled in New Mexico, the Spanish had mostly made peace with the various native groups. According to Gregg’s observations, there had been “little attention paid to the breeding of horses in New Mexico…from the fact that…the continued depredations of the hostile Indians discouraged them from their favorite pursuit [horses].” As Gregg looked back on the trends in livestock, he saw that although New Mexicans prided themselves in their horses, raiders

---

208 Pike, Exploratory Travels, 202.
211 Hämäläinen, “The Rise and Fall of Plains Indian Horse Culture,” 844.
212 Gregg, Commerce of the Prairies, 57.
compromised the practicality of raising horses for the Spanish and Pueblo due to that intense competition by these nomadic raiders for natural resources.

**The Multidimensional Frontier**

Natural resources, primarily water and horses, directly impacted the reasons for raiding and also influenced the way that the Spanish and native sedentary peoples handled the attacks on their villages and towns. The environment affected native groups and spurred them to raid, but how did those environmental factors contribute to the social and physical structure of the northern New Mexican frontier? The raids themselves and the environmental consequences affected social relations and created a fluid frontier, which had no defined boundaries and shifted over time. Location of towns, although previously discussed before in relation to water sources, became a consequence of these raids.

The unique aspect of the raids that characterized the New Mexican frontier during the eighteenth and nineteenth centuries revolved around the concept that the raids were not simply Native American against Spanish. The conflict included many more players and often natives and Spaniards found themselves fighting on the same side against a mutual enemy. The Apache, Ute, and Comanche act as examples for the way in which allegiances changed, both between native groups and between the Spanish and natives. For the first forty years of the eighteenth century, the Ute and Comanche peoples upheld an alliance with one another. As an allied body, they conducted raids on the New Mexican border for both resources and strategic gains. Due to the increase in raiding-trading success by the Comanche, the alliance eventually fell apart in the mid 1700s, leaving the Comanche and Ute on their own. Certain groups of the Ute chose instead to ally with the Spanish for protection against other nomadic tribes. In response, the Comanche people unified and continued raiding until Bautista de Anza made peace with them in the late eighteenth century.

By the 1780s, Teodoro de Croix, the commander general of the interior provinces of New Spain, described the Ute as a “numerous and valiant” people that aided the Spanish “happily against the Comanche.” Bautista de Anza experienced the alliance of the Ute people on his

---

214 Pino, *Three New Mexican Chronicles*, 130.
expedition against the Comanche. A few days after starting out, two hundred Ute and Apache men appeared and asked to join Bautista de Anza. The Ute had promised friendly relations with the Spanish when Bautista de Anza assumed the governorship, “provided [he] go on a campaign against the Comanche.” While the Ute and Apache peoples had participated in raids on the Spanish settlers in the past, and certain bands within the tribes would continue to do so in the future, they also acknowledged the benefits of joining with the Spanish in order to defeat a common enemy. Bautista de Anza utilized intriguing word choices in this entry. He claimed that the Ute asked and “reiterated incessantly with prayers” that they join in friendship with the Spanish and that Bautista de Anza defeat the Comanche. The diary paints a position of subservience by employing the word “prayers,” which commutates disparity on the part of the Ute. Because Bautista de Anza, a Spaniard with considerable power, wrote the account, it becomes difficult to determine whether the Ute desperately needed the friendship for protection against Comanche raids, or whether Bautista de Anza over exaggerated the Ute people’s plea. Regardless, the diary establishes that in colonial New Mexico, the frontier was neither static nor divided simply between native and non-native. The Ute and Apache’s alliance with Bautista de Anza demonstrate the multi-sided nature of the frontier, including the intra-ethnic conflicts between the Spanish and natives, as well as its ability to change through time.

The Ute people were not the only nomadic group that came into conflict with other tribes and felt the impact of raids and hostilities. Twice on the Domínguez and Escalante expedition in 1776, two assemblages of Indians approached the group and asked for aid. The first, five Subuagana Yutas, spoke to the two leaders about the quarrels they were experiencing with a subgroup of the Comanche people and urged Domínguez and Escalante to fear for their safety. Although the men did not heed the warning and continued on their journey, the fear with which the Yutas spoke of the Comanche in addition to their insistence on the danger the Comanche posed, demonstrated that various nomadic groups did not limit their violence and raids to just the Spanish, but attacked other nomadic groups as well. In the second encounter, an unidentified Indian from New Mexico requested Domínguez and Escalante to appeal on his people’s behalf for “aid or defense from these foes,” identifying his enemy as the Navajo.

216 Bautista de Anza, “Diary of Governor Anza’s expedition,” 125.
217 Bautista de Anza, “Diary of Governor Anza’s expedition,” 125.
218 Bautista de Anza, “Diary of Governor Anza’s expedition,” 125
219 Domínguez and Escalante, “Diary and Itinerary,” 27.
Both instances exemplify the way in which various groups attacked one another and utilized the Spanish to gain men and support in their conflicts. A third example of violence between native groups in response to raids and ecological factors presented itself in the massacre of Moqui natives, described by de Croix in 1781. A group of Moqui Indians came into the province of New Mexico, driven there by “hunger, pestilence, and war,” but the Navajo Apache murdered forty families in response. Although de Croix never provided a specific reason for their murder, it seems likely that the Navajo Apache desired the land that the Spanish allotted the Moqui because of its natural resources.

Governor Anza displayed another example of how the frontier became dynamic and fluid because of raids through the way in which he played native hostilities against one another. After the issues with the Comanche began to settle, Bautista de Anza recognized the Apache as the next looming threat for the province. In order to deal with the threat, Governor Anza utilized native politics and instigated the dissolution of the Navajo-Gila Apache alliance. In a letter between Spanish officials in August of 1785, Joseph Antonio Rengel, the ad interim Commander-General of the Interior Provinces, affirmed the split in the alliance. He confirmed that the Navajo Indians split from “the secret collusion which they maintained with the Gila Apaches, the principle enemies of this frontier” and that Rengel had proof they made an alliance with the New Mexicans “to make war on the Gilas.” Rengel wrote that because “the Navajos are persecuting them, [the Comanches] are drawing nearer to the sierras of the opposite frontier, where if they could be sought and punished with various strong detachments, they would see themselves forced to settle down or perish.” This last section of the letter tells historians two things. First, Rengel confirmed that not only had the Spanish facilitated the breakdown of the alliance, but that the Navajos actively pursued and fought the Comanche in conjunction with the Spanish. Second, the Spanish desired the Comanche to settle down; this indicates that living a nomadic lifestyle with horses and bison hunts increased raids on sedentary settlements. Rengel drew a direct connection between a nomadic lifestyle and raids of Spanish and Pueblo settlements, most likely because of competition for natural resources. Furthermore, once the

---

223 Rengel to Gálvez, August 27, 1785, in Forgotten Frontiers, 257.
Comanche themselves sued for peace with the Spanish, the Spanish encouraged native tribes even outside of New Mexican to join with the New Mexican troops and the Comanche to make war on the Apache.\textsuperscript{224} Tribes that had once been at war with the Spanish often became their allies against other enemies.

While the Spanish utilized political tension between native groups to improve their own success in New Mexico, the native groups found ways to manipulate the Spanish to their advantage as well. As the Spanish power began to wane in the early nineteenth century, the Navajo people found it most beneficial for them to raid Spanish societies, and then make peace, only to raid again.\textsuperscript{225} Although by the time of Mexican Independence, the Navajo and the Spanish found a more permanent peace, it does not detract from the ways in which native tribes utilized raids and peace for their own advantage against the Spanish in New Mexico. Certain Apache groups also utilized the Spanish to their benefit during the period of most intense Indian hostilities in the late eighteenth century. Portions of the Apache people, those not at war with the Spanish, chose to settle on reservations for protection against both the Spanish military operations and their native enemies.\textsuperscript{226} By Native American peoples, such as the Apache and Navajo, seeking protection and utilizing the Spanish to their advantage the New Mexican frontier became dynamic place where alliances changed frequently and no physical borders separated interactions between groups.

In a similar manner that the raids forced the Spanish to interact and negotiate with various nomadic groups and vice versa for protection or troops, the raids also drew the Pueblo people and the Spanish settlers closer. Most accounts describing the military activity against Comanche, Apache, or other nomadic groups contain Pueblo Indians. Beginning in the early eighteenth century, the Spanish brought the Pueblos into a military partnership and provided them with goods and supplies under the condition that the Pueblo people would fight with the Spanish.\textsuperscript{227} In many cases concerning nomadic raiders, those who made enemies of the Spanish also attacked the Pueblo people. When Father Domínguez wrote the 1775 letter discussed previously in relation to the theft of horses, he also gave a description of the fighting forces that

\textsuperscript{224} Park, “Spanish Indian Policy,” 335.
\textsuperscript{225} Douglas W. Richmond, “The Climax of Conflicts with Native Americans in New Mexico,” \textit{The New Mexican Historical Review} 80 (2005): 60.
\textsuperscript{227} Richmond, “The Climax of Conflicts,” 57-58.
pursued the raiders. Both Spanish soldiers and Pueblo men comprised the force. The most significant aspect of the description, though, comes from the ratio of Pueblo men to official Spanish soldiers; the expedition in question contained forty soldiers from a nearby presidio and three hundred men from the El Paso Pueblo.\textsuperscript{228} This large outnumbering of Pueblo men to Spanish military occurred at various other instances as well. When Governor Bautista de Anza set off on his campaign against the Comanche in 1779, he recorded the type and number of men that comprised his force. In a similar fashion to the force Domínguez described, Indians also consisted of the largest part of Bautista de Anza men; two hundred fifty-nine Indians compared to only eighty-five soldiers and two hundred three militiamen.\textsuperscript{229} Once the additional two hundred Ute and friendly Apache troops joined the Governor a few days into the expedition, the ratio of Indians allied with the Spanish to the number of men from Spanish heritage increased substantially.

One final way that the nomadic raids shaped the frontier manifested itself in the ways in which they shaped and defined towns and population centers. As described above, availability of water resources affected the location of settlements; water also played a role in the conduction of the raids by nomadic groups. Subsequently, these nomadic raids added another dimension to where Spanish and Pueblo New Mexicans could settle and how they designed and fortified their settlements. Referring back to the map discussed above, created by Pacheco, Domínguez criticizes the arrangement of the houses and small communities, describing them as “extremely ill arranged” and “scattered about at a distance from one another.”\textsuperscript{230} This distance also added to the feasibility for raiders to take horses. He alluded to the benefits of creating communities that resemble the ways in which the Pueblos built their structures, which were better suited against attacks. Later on in his account, Domínguez refers to the benefits of certain Pueblo towns because of their “high adobe walls with two gates…for resistance again the enemy.”\textsuperscript{231} Raids often influenced the way that both the Spanish and Pueblos envisioned and erected their structures. Josiah Gregg exemplifies the consequences when he wrote “the depredations of the Apache have been of such long duration, that…haciendas and ranchos have been mostly

\textsuperscript{228} Domínguez to Murillo, November 4, 1775, in \textit{The Missions of New Mexico}, 271.
\textsuperscript{229} Baustista de Anza, “Diary of Governor Anza’s Expedition,” 122.
\textsuperscript{230} Domínguez, \textit{Missions of New Mexico}, 4.
\textsuperscript{231} Domínguez, \textit{Missions of New Mexico}, 137.
abandoned, and the people chiefly confined to towns and cities.”

Looking back in time, Gregg’s observations show that because of the raids, the characteristic clustering of population directly resulted from native hostilities. Recent scholarship has determined that during the Spanish colonial period of New Mexico, approximately ninety-nine percent of the population occupied only one percent of the land. This striking statistic emphasizes the way in which raids shaped the development of habitation in New Mexico.

In New Mexico during the eighteenth and early nineteenth centuries, natural resources and raids shaped one another as well as the distribution of people along with social relations between natives and those of Spanish or mixed descent. MacCameron described the area around the Villa of Santa Cruz as a hub of activity, part of the one percent of occupied land in New Mexico, because of its proximity to a supply of water and the ability of a larger conglomeration of people to discourage raiders. Water drastically influenced the distribution of habitation and settlements as well as influenced the nomadic raiders’ need for horses. Horses became essential to the way that the Apache, Comanche, and Navajo – among others – fought and hunted. Because of the increase in bison and the creation of a horse-bound Plains Indian culture, nomadic raiding became the way in which nomadic groups dealt with Spanish presence and their changed societies. This reliance created a cyclical system of raiding for horses in order to provide for a nomadic system that placed its foundation on access to water and bison, both of which depended on the native’s ability to access horses.

Although the natives themselves left few records and the majority of this analysis came from Spanish or American documents, military records, travel logs, and official correspondences, it still showcases the overwhelming presence of natural resources in the lives of both sedentary and nomadic peoples. By analyzing the ways in which groups raided the pueblos and other settlements, it also becomes apparent that natural resources heavily influenced the events and the ways in which the Spanish and Pueblos retaliated. Others had explored the details of raids and relationships between the Comanche, Navajo, Ute, Apache, Spanish many times before in various contexts; power, violence, and trade, yet the historiography had, until now, lacked the environmental perspective. As Hämäläinen and Truett advise, focusing on the entanglements instead of untangling them elucidate the larger patterns of water scarcity,

232 Gregg, *Commerce of the Prairies*, 95-96
233 MacCameron, “Environmental Change in New Mexico,” 20.
234 MacCameron, “Environmental Change in New Mexico,” 21.
competition for natural resources, and the importance of livestock and the horse. The formation of New Mexican settlements and social relations found its roots in ecological factors and the raids of various Native American peoples.
Bibliography

Primary Sources


Pino, Pedro Bautista. Three New Mexican Chronicles: The Exposición of Pedro Bautista Pino, 1812; the Ojeada of Antonio Barreiro, 1832; and the Additions of José Agustín de Escudero, 1849. Edited by H. Bailey Carroll and Juan Villasana Haggard. Albuquerque: Quivira Society, 1942.

Secondary Sources


Simmons, Marc. “Spanish Irrigation Practices in New Mexico.” New Mexico Historical Review 47, no. 2 (1972): 135-150.


